Avid Technology, Inc.

MOS Gateway
Installation & Operations Manual

Version 2.0

make manage move | media™ Avid.

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Avid
6400 Enterprise Lane
Madison, Wisconsin 53719 USA
Tel: +1-608-274-8686 Fax: +1-608-273-5876

Avid
Intec 1
Wade Road
Basingstoke Hants RG24 8NE UK
Tel: +44 1256 814300 Fax: +44 1256 814700

Avid
315 Alexandra Road
#03-01 Performance Centre
159944 Singapore
Tel: +65 3789 534 Fax: +65 475 7666

Avid
Tegel Forum
Breitenbachstraße 10
Berlin 13509 GERMANY
Tel: +49 30 5900993 0 Fax: +49 30 5900993 24

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Preface

Congratulations on your purchase of iNEWS MOS Gateway, the system that removes barriers between newsroom computing and broadcasting. MOS Gateway uses the MOS protocol as a standard for communications between newsroom computer systems and Media Object Servers (MOS), such as video servers, audio servers, still stores, and character generators.

Who Should Use This Guide

This manual is written for journalists, producers, directors, writers, and various technical personnel responsible for using the iNEWS MOS Gateway in a broadcast newsroom. Portions of the manual provide installation data for technicians. Other chapters provide configuration and maintenance information for system administrators who are managing the system.

n *It is strongly recommended that system administrators have prior experience in or classroom knowledge of the Windows-based operating systems, such as Windows XP®.*

About This Manual

This guide will lead you through even the most complex procedures with task-oriented instructions, illustrated for a more realistic presentation of the actual icons and images you will encounter. The information provided

here builds on basic user procedures, while adding a complete explanation of all the tools and techniques required to create, apply, and adjust various settings, including useful tips, shortcuts, and custom options.

The Table of Contents that precedes this preface lists all topics included in the book. They are presented with the following overall structure:

- The *Introduction* helps you get oriented with beginning concepts and general work flow and provides valuable pointers to keep in the back of your mind as you proceed.
- The main body of the guide follows the natural flow of your work, with clear and comprehensive step-by-step procedures.
- At the back of the book is a comprehensive *Glossary*, providing cross-industry terms and definitions.
- Finally, a detailed *Index* helps you quickly locate specific topics.

This manual provides requirements and specifications for your system in the following areas:

- Minimum hardware and software components
- Installation procedures
- System configuration and maintenance
- Troubleshooting

Use this manual to prepare for and set up your system on the network, after you have purchased the MOS Gateway components according to iNews requirements and specifications. Before installing any equipment, the site must already have a configured network.

Symbols and Conventions

The MOS Gateway documentation uses the following special symbols and conventions:

1. Numbered lists, when the order of the primary items is important.
    a. Alphabetical lists, when the order of secondary items is important.

- Bulleted lists, when the order of primary items is unimportant.
  - Indented dashed lists, when the order of secondary items is unimportant.

t A single-step procedure or as a list of optional procedures.

Look here in the margin for tips and environment-specific information.

In the margin you will find tips that help you perform tasks more easily and efficiently. You will also find information specific to a particular operating environment.

n *A note provides important related information, reminders, recommendations, and strong suggestions.*

c **A caution means that a specific action you take could harm your computer or cause you to lose data.**

Cross References

Cross references are provided throughout this manual to give readers locations where additional—sometimes more detailed—information on a certain topic can be found. In some cases, the chapter name and number is provided. In others, a heading, table number of figure number is used. In cases when the information in a chapter other than the one in which the cross reference is located, page numbers are given along with the heading.

n *See "About This Manual" on page 7 for more information on what chapters are in which sections of this manual.*

Keyboard Conventions

- Ctrl+*x* means to press and hold down the Control key and then press another key on the keyboard, represented here by *x*. This is also used for other key-combinations such as Alt+*x* or Shift+*x*.
- "Type" in a command procedure means to type the command on the command line and then "press" the Enter key.
- "Select" means to choose an operation on a drop-down or pop-up menu.

- “Click” means to click the left mouse button, usually in response to a dialog box. “Right-click” means to click the right mouse button.

If You Need Help

If you are having trouble using MOS Gateway, you should:

1. Repeat the procedure, carefully following the instructions provided for the task in this guide.
2. Refer to the documentation included with your hardware to review the maintenance procedures or the hardware-related issues.
3. Check the Support section of Avid Web site at `http://www.avid.com` for online technical publications and additional telephone support phone numbers.
4. Maintenance Agreement contract customers can contact Avid Broadcast Customer Support personnel at any of these 24-hour global telephone numbers:
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   - 44 1256 814222 in Europe, Africa, and Mid-East
   - 61 2 9963 2895 in Asia/Pacific

   Or online:
   - e-mail inews-`support@avid.com`
   - `http://www.avid.com/support/contact.html`

For general information, call your local Avid reseller or in North America call the Avid Broadcast Customer Relations desk at 1-800-869-7009.

Related Information

Contact your Avid Sales representative for documentation and information on other Avid® products, such as the iNEWS™ newsroom computer system, Media Browse™, EditStar™, LeaderPlus™, MOS Gateway, and so forth.

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The Avid Broadcast Technical Publications department continually seeks to improve its documentation. We value your comments about this manual or other Avid-supplied documentation.

Send your documentation comments by e-mail to:

`techpubs_wi@avid.com`

Include the title of the document, its part number, revision, and the specific section that you are commenting on in all correspondence.

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Chapter 1

Introduction to MOS Gateway

This chapter contains the following major sections:

- Overview of MOS Gateway
  - MOS Control Workflow

Overview of MOS Gateway

The iNEWS MOS Gateway is an application that does the following:

- receives information from the iNEWS newsroom computer system as machine control events are entered in production cues in scripts
- converts the information into commands in version 2.8 of the MOS Protocol and directs it to specified MOS-compliant devices
- routes the status of each media object in a rundown on a MOS device back to the iNEWS Workstation

MOS Gateway can handle multiple shows simultaneously.

MOS Control Workflow

MOS Gateway is designed to work with multiple vendors' MOS devices. Each MOS device can be accompanied by an ActiveX control that is hosted by the iNEWS Workstation, or MOS item replication can be used for devices that do not have ActiveX controls.

Replication means that MOS Gateway v2.0 supports the Media Object Metadata (MOM) connection with a MOS device as well as the Rundown/Running Order (RO) connection. Each MOS device can send MOM to a single device-specific queue, allowing iNEWS to host a copy of a MOS device's inventory. Each story in the device-specific queue contains information about a different MOS item. The `MOSREPLICATION` form in iNEWS determines how MOS items are replicated to a device-specific queue—that is, whether the MOS item appears in the story form, as a production cue in the story body, or both—and what metadata is displayed as normal text in the story body.

Replication also provides users with the capability to search the MOS inventory using iNEWS search tools.

MOS replication requires an iNEWS user account with write access to all device-specific queues that will store replicated MOS items. See "Configure iNEWS for MOS Replication (Optional)" on page 68 for more information. Replication options are configured using the MOS Administration tool. See "Using the MosAdmin Application" on page 91 for more information.

An ActiveX control provides a live view of the media inventory on the MOS device. The news staff can use an ActiveX control (also known as a plugin) or replicated metadata to browse a MOS device's inventory and insert the appropriate information into a machine control event in the script. See Figure 1 for a visual diagram of the two paths by which a MOS device's media inventory may be viewed at an iNEWS Workstation.

For instance, users can copy a MOS item's production cue marker—shown at left—from a MOS device's replication queue and paste it directly into the body of an iNEWS story. For MOS items that appear in the story form, an entire story may be duplicated from the device-specific queue into an iNEWS rundown and then its title and body edited accordingly, such as changing the existing title to the story's name (slug) and replacing any text with the story's script.

After the news staff has entered the machine control events in the scripts, the producer can download rundowns to the MOS device using the monitor server in iNEWS and MOS Gateway. The downloaded rundown can be controlled using the MOS device's interface.

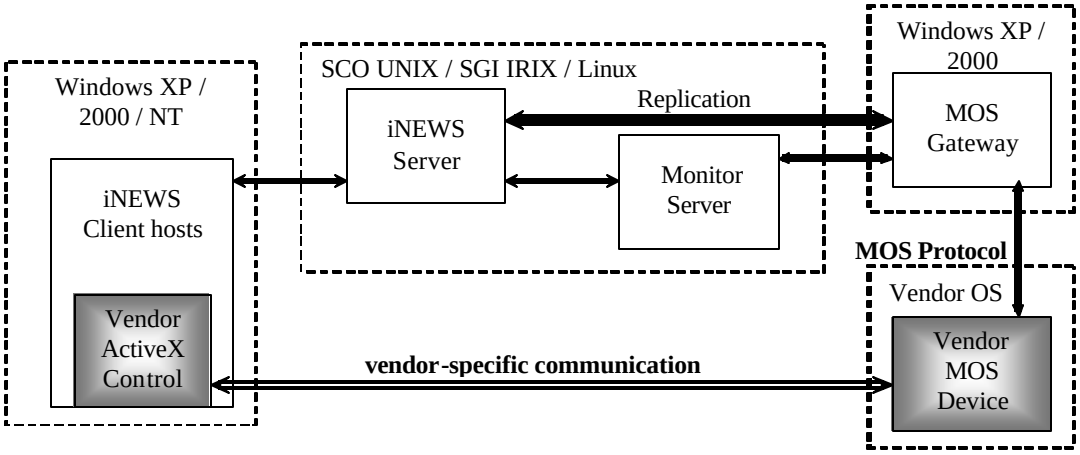


Figure 1 MOS Control Workflow Diagram

n *Monitor server is a utility program that checks a show's event requests for errors, creates composite and event lists, and sends playlists to MOS Gateway. For more information on creating monitor servers, see "Creating a Monitor Server for Each Show" on page 37.*

Loading a Show to the MOS Gateway

When your newsroom staff builds a show, they insert special keywords into scripts, referred to as machine control events. These items include at least a word to identify the specific machine or a machine type, such as CG or SS, and some information to indicate that they want that machine to display. If the machine is a MOS device, these machine control events are created using the ActiveX control that came with the MOS device.

Monitor Mode - ON

When the monitor server is turned on—usually by the producer, from the iNEWS Workstation´s Tool menu—it will read all the machine control events in the rundown and build *playlists*, also known as *event lists*, for each device. The monitor server performs as much error checking as it can without communicating with any broadcast equipment.

After the monitor server is turned on, it continues to monitor the rundown, examining every story saved for new, deleted, or updated events in the playlist.

MOS Gateway is not yet involved. Playlists can be printed and distributed to equipment operators. The devices can be controlled using traditional methods.

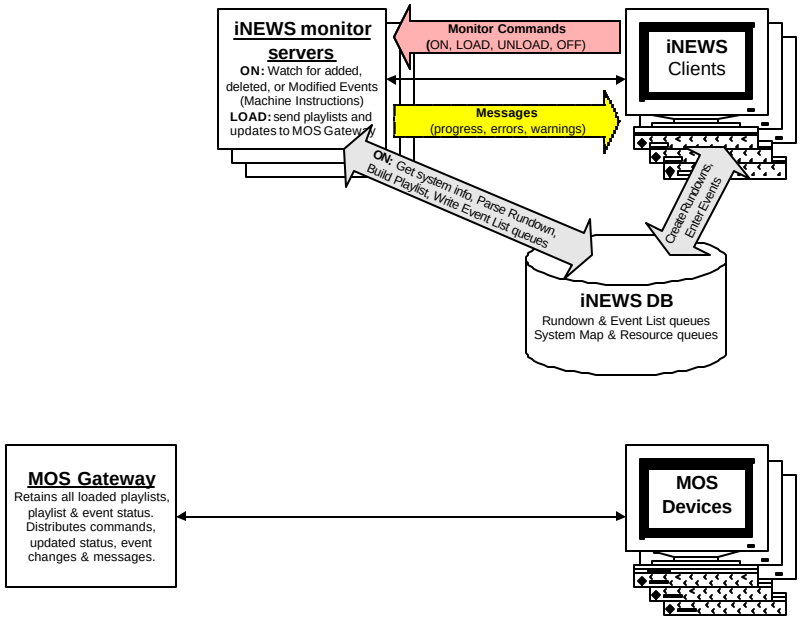

iNEWS monitor servers
ON: Watch for added, deleted, or Modified Events (Machine Instructions)
LOAD: send playlists and updates to MOS Gateway
Monitor Commands
(ON, LOAD, UNLOAD, OFF)
Messages
(progress, errors, warnings)
iNEWS Clients
ON: Get System info, Parse Rundown, Build Playlist, Write Event List queues
Create Rundowns, Enter Events
iNEWS DB
Rundown & Event List queues
System Map & Resource queues
MOS Gateway
Retains all loaded playlists, playlist & event status. Distributes commands, updated status, event changes & messages.
MOS Devices

Figure 2 Monitor Mode - ON Diagram

Monitor Mode - LOAD

As air time nears and the newsroom staff completes the rundown, someone—usually the producer or equipment operator—will instruct the monitor server to load the playlist into MOS devices. As the rundown is loaded in MOS Gateway, MOS Gateway loads individual playlists to the appropriate MOS device. The MOS device begins its assigned task, such as inserting CG text, checking for availability of video clips, and so forth.

Each MOS device sends MOS Gateway the status of the playlist, called a *running order* in the MOS Protocol. Each MOS device also sends the status of individual running order items, each one corresponding to a machine control event.

MOS Gateway then forwards these status messages to the monitor server. Error messages are returned to the iNEWS Workstation used to load the rundown. The monitor server also inserts status for video clips, such as whether the clip is available, into stories in the rundown and event lists located in the iNEWS database.

The MOS device operator can now take control of the MOS device and take the show to air.

Figure 3 depicts communication paths after the monitor server is instructed to load playlists, status, and user messages.

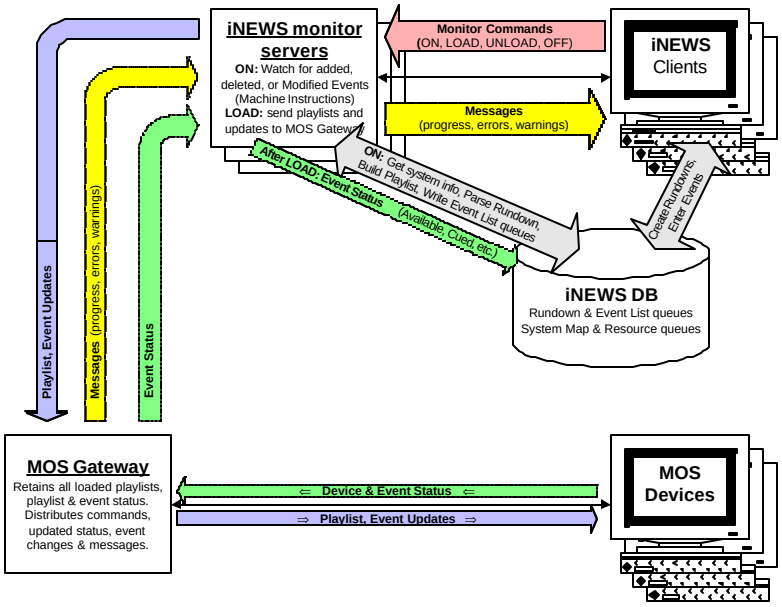

iNEWS monitor servers
ON: Watch for added, deleted, or Modified Events (Machine Instructions)
LOAD: send playlists and updates to MOS Gateway
Monitor Commands (ON, LOAD, UNLOAD, OFF)
Messages (progress, errors, warnings)
iNEWS Clients
ON: Get system info, Parse Rundown, Build Playlist, Write Event List queues
After LOAD: Event Status (Available, Cued etc.)
Create Rundowns, Enter Events
iNEWS DB
Rundown & Event List queues
System Map & Resource queues
Playlist, Event Updates
Messages (progress, errors, warnings)
Event Status
MOS Gateway
Retains all loaded playlists, playlist & event status. Distributes commands, updated status, event changes & messages.
⇐ Device & Event Status ⇐
⇒ Playlist, Event Updates ⇒
MOS Devices

Figure 3 Monitor Mode - LOAD Diagram

Chapter 2

Preparing for Installation

This chapter describes the preliminary steps you must take before installing the MOS Gateway software, including:

- Familiarizing yourself with this manual, release notes, and other iNEWS documentation.
- Verifying required hardware and software components

This chapter contains the following major sections:

- Before You Begin the Installation Procedure
- Hardware Requirements
- Software Requirements
  - Supported MOS Devices

Before You Begin the Installation Procedure

Setting up MOS Gateway involves doing tasks in three places:

- iNEWS Servers (at the console)
- MOS Gateway
- MOS devices to connect to

n *You should consult the iNEWS Newsroom Computer System Operations Manual for specific information on iNEWS Servers, the console, or various related system operations.*

Before you begin installing the MOS Gateway software, do the following:

- Read the *iNEWS MOS Gateway Release Notes* for the most up-to-date product and installation information.
- Familiarize yourself with the entire installation procedure described in this manual.
- Ensure the installation CD is available.

Hardware Requirements

To install and run MOS Gateway, your system must have the minimum base equipment described in Table 1. For a list of qualified PCs, contact Avid Broadcast Customer Support.

n *Minimum requirements are subject to change. For immediate updates on hardware and software requirements, pertaining to this and all Avid products, visit Avid's Web site at:* `www.avid.com/products`. *MOS Gateway information is provided as part of specifications for the iNEWS newsroom computer system.*

Table 1 Hardware Required for MOS Gateway

Device	Description
CPU	500 MHz Intel Pentium® II (multi-processor CPUs not supported)
Memory	1 GB RAM
Keyboard	Standard Windows-based keyboard
Monitor	15-inch color
Video card	Standard SVGA 1024x768
Hard drive	10 GB drive
Disk controller	IDE OK
Mouse	Windows-compatible mouse
CD-ROM drive	4X CD-ROM drive
Network card	Windows-compatible 10/100 NIC

Software Requirements

There are certain minimum requirements that must be met to install and operate MOS Gateway. They are:

- Windows 2000 operating system with Service Pack 3, or Windows XP Professional with Service Pack 1
- iNEWS newsroom computer system (version 1.5.1 or higher)
- Internet Explorer 5.0 with Java Virtual Machine (version 5.0.3802 or higher)

All iNEWS Workstations on a network using MOS Gateway 2.0 must be running version 1.5.1 or higher of the iNEWS client software.

Supported MOS Devices

The following is a list of supported MOS devices; however, this list is subject to change. For the latest information, visit the Avid Web site or contact Avid Broadcast Customer Support.

- Avid AirSPACE (CountDown)
- Chyron Aprisa (100, 250, and SSX)
- Grass Valley Group’s NewsQ Pro
- Netia Radio-Assist
- Omnibus Columbus
- Omnibus News Control
- Pinnacle FXDeko
- Proximity Xenostore (with Pinnacle FXDeko)
- Sony NewsBase
- Sundance Digital NewsLink
- vizrt Pilot

Chapter 3

Installing MOS Gateway Program Files

This chapter describes the process of installing the MOS Gateway and contains the following major sections:

- Overview of the Setup
  - Adding IP Addresses on MOS Gateway Server
  - Installing MOS Gateway Software
  - Upgrading MOS Gateway Software

Overview of the Setup

The following tasks must be performed on the MOS Gateway Server.

- Add IP addresses for the MOS Gateway and iNEWS Servers
- Install the MOS Gateway software
- Configure the MOS Gateway software

The first two tasks are described in this chapter. The configuration of the MOS Gateway is in Chapter5.

Adding IP Addresses on MOS Gateway Server

Ideally, all MOS Gateway Servers, iNEWS Servers, and MOS devices would have each other's IP addresses and computer names. It is not necessary to include IP addresses for iNEWS Workstations or other equipment.

n *The monitor server communicates with the MOS Gateway software only if the MOS Gateway Server's IP address is added to all of the iNEWS Servers'* `/etc/hosts` *files. Procedures for configuring iNEWS Servers, including adding MOS Gateway IP addresses, are located in "Adding IP Addresses for the MOS Gateway" on page62.*

This section provides steps for adding IP addresses to the MOS Gateway Server.

To add IP addresses to the MOS Gateway Server:

1. Use My Computer or the Windows Explorer to open the `\WINNT\system32\drivers\etc` folder.
2. Double-click on the `hosts` file.
3. A dialog box may appear with a list of programs to use for opening the file. Scroll down the list and select Notepad. Ensure that you *uncheck* the box to "Always use this program."
4. Click OK. The `hosts` file opens in a Notepad window.

5. At the bottom of the file, add lines listing the IP addresses and computer names for iNEWS Servers, MOS Gateway Servers, and MOS devices. For example:

```
125.1.0.1       NRCS-A       nrcs-a      nrcs-a.yourdomain.com
125.1.0.2       NRCS-B       nrcs-b      nrcs-b.yourdomain.com
125.1.10.50     MOSGWY       mosgwy      # MOS Gateway
125.1.10.51     MOSDEV1      mosdev1     # MOS device
125.1.10.60     MG1          mg1         # MOS Gateway Server1
125.1.10.70     MG2          mg2         # MOS Gateway Server2
```

6. Save the file and close the Notepad window.

When saving the newly edited file, ensure that it does not have a `.txt` extension. The default options in Windows Explorer will not display this crucial information. To change this setting, open Windows Explorer and select Options from the View drop-down menu. In the dialog box, check Show All Files and uncheck Hide file extension for known file types, then click OK.

7. Repeat this procedure for each MOS device.

Installing MOS Gateway Software

This section provides information pertaining to installing MOS Gateway on a new system. If upgrading a system already running an earlier version of the MOS Gateway software, refer to “Upgrading MOS Gateway Software” on page33.

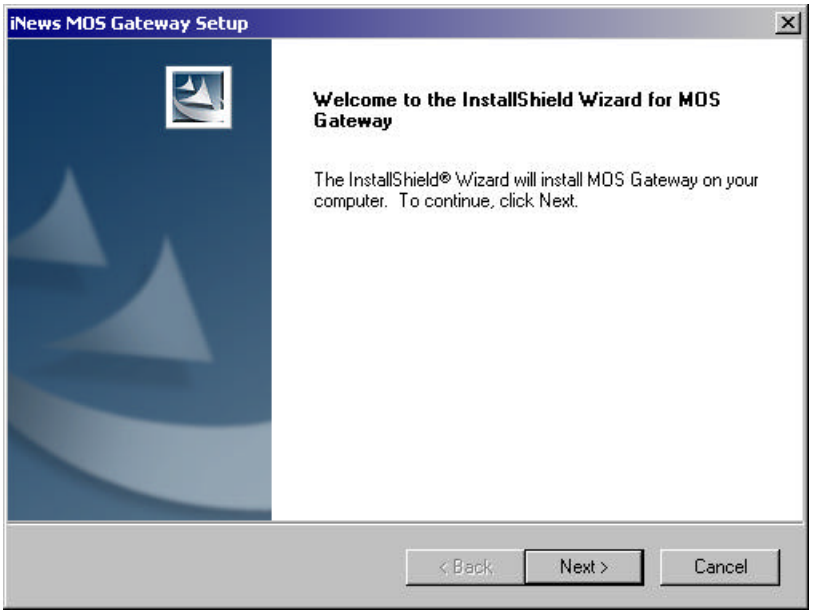
To install MOS Gateway:

1. Insert the iNEWS MOS Gateway CD into your CD-ROM drive.

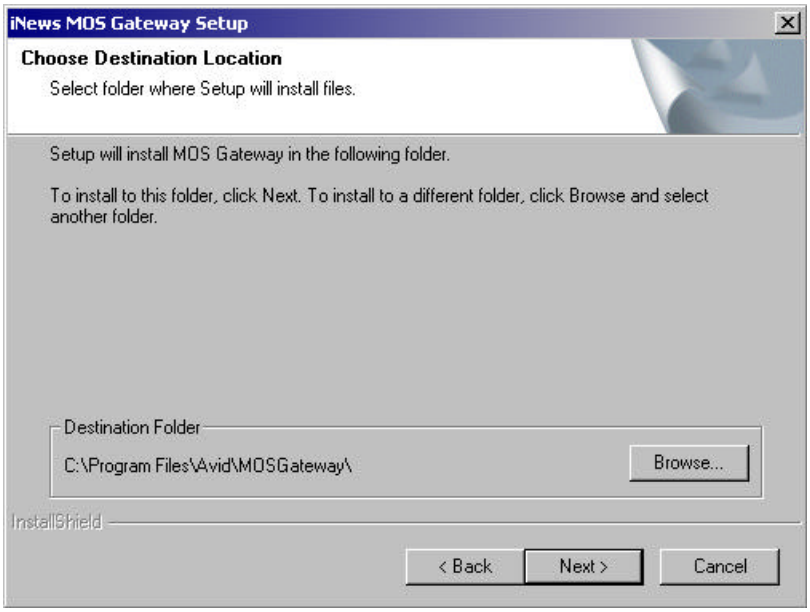
2. Open Windows Explorer. To do this, click the Start button and select Windows Explorer from the menu, or press the Windows and E keys simultaneously. The Windows key is the one with the Windows logo on it, as shown in margin.

3. In the Explorer window, select the CD drive.

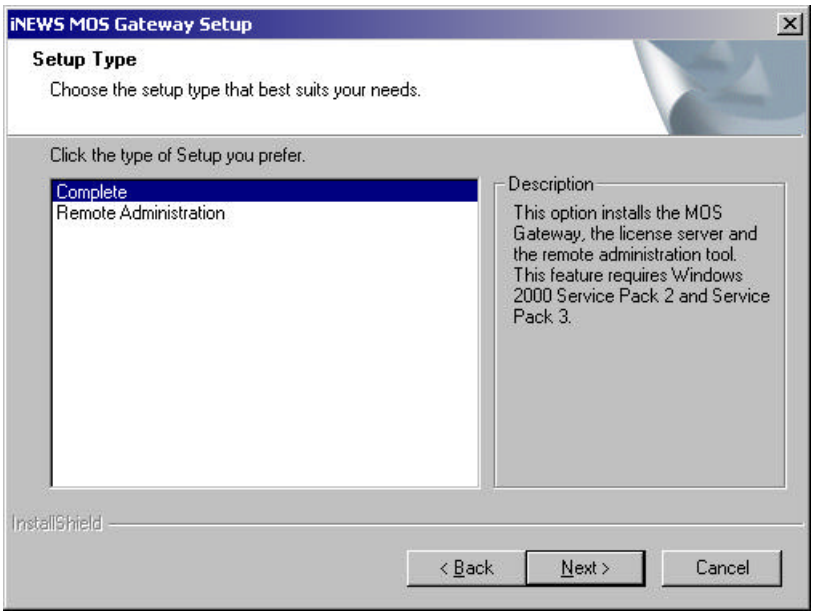
4. Click the `setup.exe` file. The MOS Gateway Setup dialog box opens.


iNews MOS Gateway Setup
Welcome to the InstallShield Wizard for MOS Gateway
The InstallShield® Wizard will install MOS Gateway on your computer. To continue, click Next.
< Back
Next >
Cancel

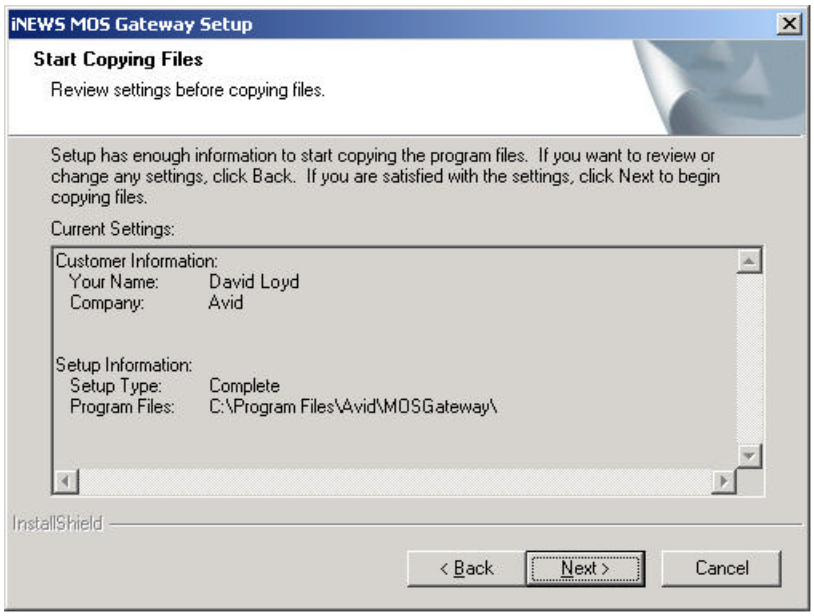
5. Click the Next button. The Choose Destination Location dialog box opens.


iNews MOS Gateway Setup
Choose Destination Location
Select folder where Setup will install files.
Setup will install MOS Gateway in the following folder.
To install to this folder, click Next. To install to a different folder, click Browse and select another folder.
Destination Folder
C:\Program Files\Avid\MOSGateway\
Browse...
InstallShield
< Back
Next >
Cancel

6. Click Next to accept the default setting for the Destination Folder or click Browse to set another drive and directory as the destination.
7. Select the type of setup:
   - A Complete setup installs the MOS Gateway Server software, the License Service and Remote Administration tool.
   - A Remote Administration setup installs only the Remote Administration tool.

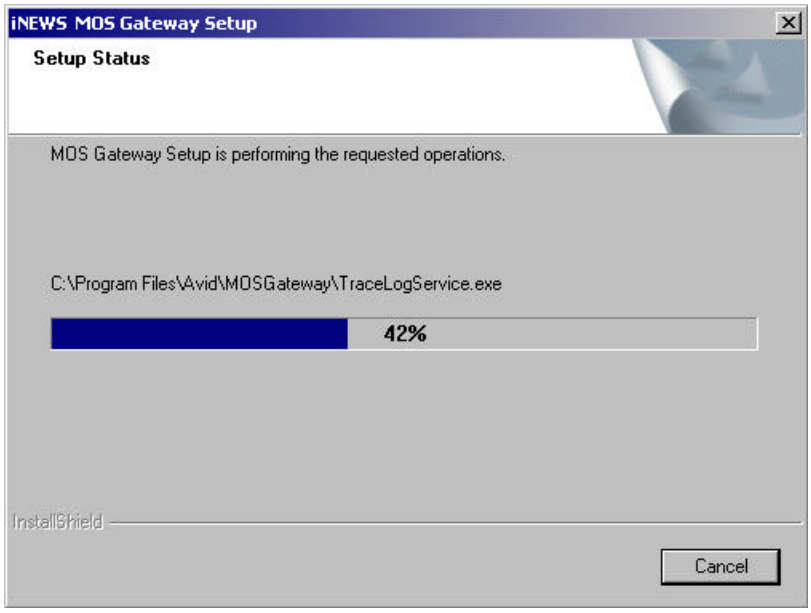

iNEWS MOS Gateway Setup
Setup Type
Choose the setup type that best suits your needs.
Click the type of Setup you prefer.
Complete
Remote Administration
Description
This option installs the MOS Gateway, the license server and the remote administration tool. This feature requires Windows 2000 Service Pack 2 and Service Pack 3.
InstallShield
< Back
Next >
Cancel

8. Click Next. The Start Copying Files dialog box appears, allowing you to review the your selections for the setup before initiating the copy process.

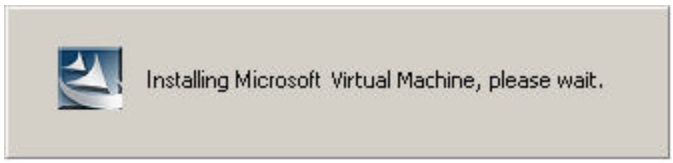

iNEWS MOS Gateway Setup
Start Copying Files
Review settings before copying files.
Setup has enough information to start copying the program files. If you want to review or change any settings, click Back. If you are satisfied with the settings, click Next to begin copying files.
Current Settings:
Customer Information:
Your Name: David Loyd
Company: Avid
Setup Information:
Setup Type: Complete
Program Files: C:\Program Files\Avid\MOSGateway\
InstallShield
< Back
Next >
Cancel

9. If a change must be made, click Back to do so; otherwise, click Next to continue.

The Setup Status dialog box appears with a progress bar, indicating the percentage of installation completeness.

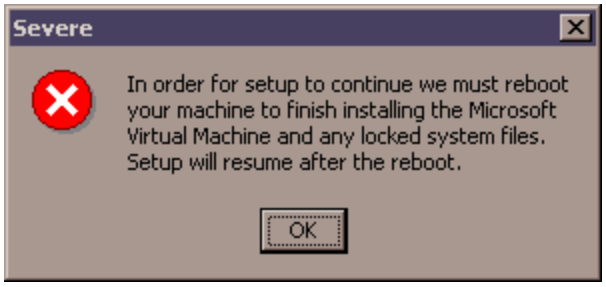


10. The MOS Gateway requires the Microsoft® Java Virtual Machine, so it is automatically installed next.



n *If Virtual Machine already exists on the computer, the installation program will detect it and skip steps 10 and 11.*

11. After installation of the Java Virtual Machine is complete, the following message will appear, notifying you the computer must be rebooted.


Severe
In order for setup to continue we must reboot your machine to finish installing the Microsoft Virtual Machine and any locked system files. Setup will resume after the reboot.
OK

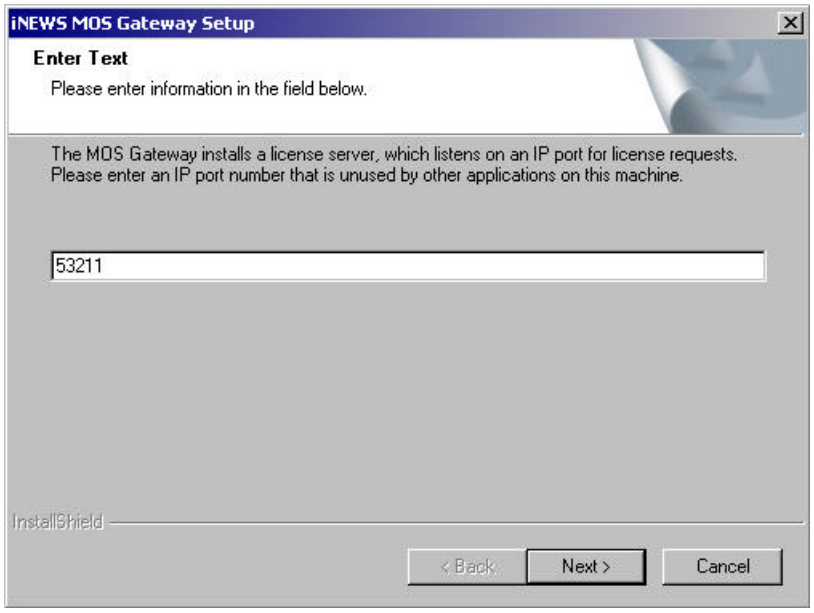
Click OK. The computer will reboot and the installation program will continue.

n *If installing the Remote Administration only—as selected in step 7—skip steps 12 through 15.*

12. If a Complete setup type was chosen in step, then Setup installs the Microsoft Installer and XML Parser.

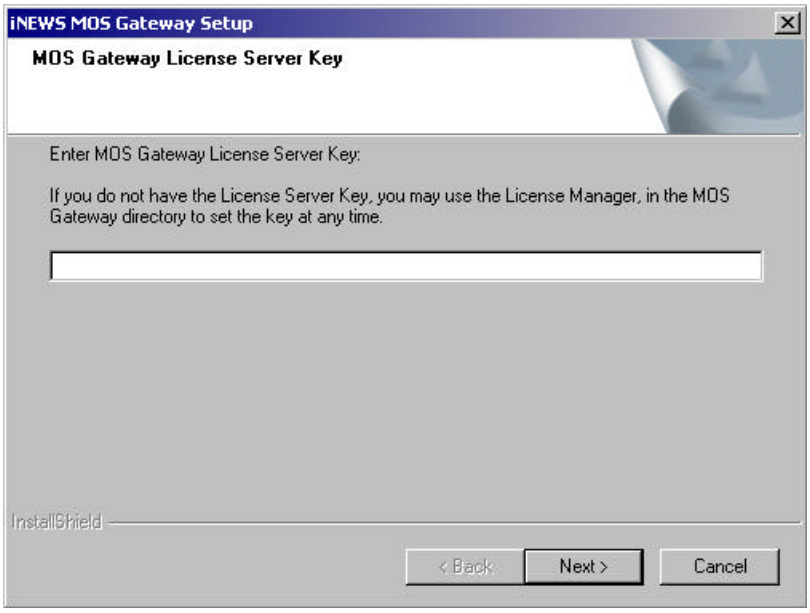
13. MOS Gateway installs a license server that listens on an IP port for license requests. In the dialog box that appears, specify an IP port that is not used by any other application on the MOS Gateway Server.

The default is 53211.


iNEWS MOS Gateway Setup
Enter Text
Please enter information in the field below.
The MOS Gateway installs a license server, which listens on an IP port for license requests.
Please enter an IP port number that is unused by other applications on this machine.
53211
InstallShield
< Back
Next >
Cancel

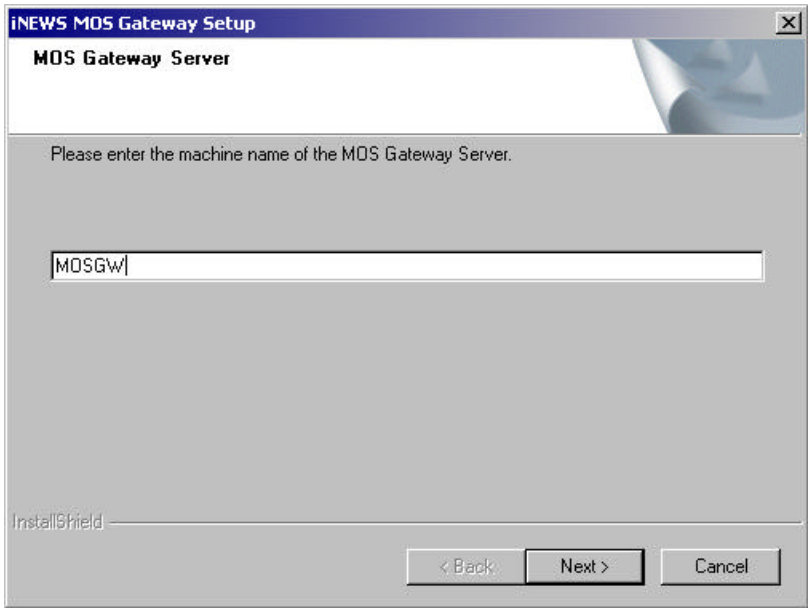
14. Click Next.

The MOS Gateway License Server Key dialog box appears.

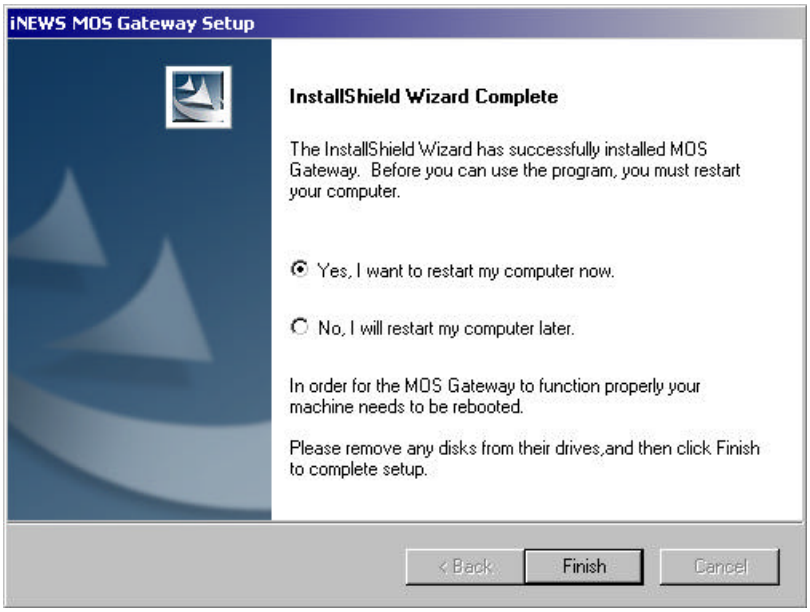

iNEWS MOS Gateway Setup
MOS Gateway License Server Key
Enter MOS Gateway License Server Key:
If you do not have the License Server Key, you may use the License Manager, in the MOS Gateway directory to set the key at any time.
InstallShield
< Back
Next >
Cancel

15. If you received a license key from Avid with your purchase, you may enter it. If not, contact Avid Broadcast Customer Support with your customer ID and MOS Gateway Server hostname to receive one.

16. Type the name of the MOS Gateway Server, if necessary. Since this information is typically supplied automatically by the setup program, accept the default by clicking Next.



17. After the License Server Key is entered, a dialog box appears indicating the successful completion of the installation. Select Yes to restart the computer, remove any disks, and click Finish.


iNEWS MOS Gateway Setup
InstallShield Wizard Complete
The InstallShield Wizard has successfully installed MOS Gateway. Before you can use the program, you must restart your computer.
Yes, I want to restart my computer now.
No, I will restart my computer later.
In order for the MOS Gateway to function properly your machine needs to be rebooted.
Please remove any disks from their drives,and then click Finish to complete setup.
< Back
Finish
Cancel

Upgrading MOS Gateway Software

Before upgrading to a newer version of MOS Gateway software, any previous version of the software must be uninstalled first.

Running the setup program on a system that already has a previous version installed will not overwrite all the necessary files.

Additionally, version 1.0 of the MOS configuration file (`mosconfig.xml`) cannot be used with MOS Gateway version 2.0. Since the new configuration file will require editing after the installation, print the old file as a reference before uninstalling the old software and upgrading to a new version of MOS Gateway.

To print the MOS configuration file:

1. Open Notepad.

n *The Notepad program may typically be launched using the Start button on the Windows Task bar—for instance, select Start > Programs > Accessories > Notepad. The Notepad window opens.*

2. Select File > Open.
3. Navigate to the configuration file, which is an XML file located at: `C:\Program Files\Avid\MOSGateway`
4. Do one of the following to print the `mosconfig.xml` file:
   - Select File > Print.
   - Press Ctrl+P.

To uninstall MOS Gateway:

- Use the Add/Remove programs feature in the Windows Control Panel.

After all previous versions of the software is uninstalled, upgrade by installing the latest version of MOS Gateway, according to the procedure in “Installing MOS Gateway Software” on page25.

After the new version of software is installed, complete the upgrade by using the printed copy of your old configuration file to edit the new default `mosconfig.xml` file with your site’s `<mosDevice>` information. See “Editing the Configuration File” on page78 for more information.

Chapter 4

Setting up the iNEWS Server

After MOS Gateway is installed, you must set up the iNEWS Server to use MOS Gateway. This chapter provides the procedures for setting up the servers.

This chapter contains the following major sections:

- Configuring iNEWS Servers
  - Configuration Summary
  - Configuration Details

Configuring iNEWS Servers

There are certain tasks that must be performed on the iNEWS Servers at the console, and at an iNEWS Workstation. If you have ControlAir™ (formerly known as iNEWS Broadcast Control System or BCS), much of this work may already be done. These tasks must be completed to download playlists and updates to MOS Gateway.

This chapter assumes:

- Your site has a fully functioning network.
- Your newsroom computer system servers are operational and running the iNEWS Server software, which supports the MOS protocol.
- The iNEWS Servers are connected to a console multiplexor, to which Customer Support technicians have dial-in access.
- The person performing the installation has attended an iNEWS, AvidNews, or NetStation system administration course or has equivalent experience. This includes having a working knowledge of `ed`, the UNIX line editor, a familiarity with the iNEWS client software, and selecting servers at the console.

n *It is highly recommended that you have an iNEWS Newsroom Computer System Operations Manual available while conducting procedures found in this chapter. Selecting servers is explained in Chapter 2 of the operations manual and the UNIX line editor is explained in Chapter 10.*

Configuration Summary

The set-up procedure has the following steps: Each step is explained further in “Configuration Details” on page37.

1. Creating a Monitor Server for Each Show (page 37)
2. Creating Composite and Event List Queues (page 44)
3. Set Up Queue and Story Forms (page 48)
4. Edit the SYSTEM.MOS-MAP Story (page 51)
5. Assigning Forms to Queues (page 53)

6. Create an Entry in the SYSTEM.MAP Story (page 55)
7. Adding IP Addresses for the MOS Gateway (page 62)
8. Updating the iNEWS System Dictionaries (Optional) (page 64)
9. Configure iNEWS for MOS Replication (Optional) (page 68)

Configuration Details

The following steps do not include setting up external devices, such as character generators and still stores, which play broadcast events. Refer to the manufacturer's documentation provided with the device for more configuration details.

The configuration procedure comprises the following steps:

Step 1: Creating a Monitor Server for Each Show

Monitor server is a utility program that checks a show's event requests for errors, creates composite and event lists, and sends playlists to MOS Gateway.

This section assumes rundown queues for the shows being monitored already exist. If not, create them before continuing. Refer to the *iNEWS Newsroom Computer System Operations Manual* for more information.

A monitor server must be assigned device and mailbox numbers—typically, these numbers are the same. A device number is chosen for monitor server so iNEWS recognizes the server as a valid device. The device number must be entered in the system's configuration file. The mailbox number must be assigned to both the show's monitor server and its rundown queue.

n *A mailbox is an activation mechanism for a server (utility) program, so if a queue has a mailbox number matching a server program, then that server is the one activated or "awakened" whenever something happens to the queue. See Chapter 14 in the iNEWS Newsroom Computer System Operations Manual for more information on mailboxes and other server programs.*

The mailbox enables iNEWS to notify the monitor server of changes made to a rundown queue while a show is monitored. The monitor server then updates composite and event lists, as well as any playlists, if necessary.

To create and configure a monitor server:

1. Check the iNEWS configuration file (`/site/config`) and choose the next available device number for the monitor server, from the range of 3-digit numbers reserved for use by your system's server programs, such as 201 to 300.

Valid standard mailbox numbers are 1 through 4096. For more on mailboxes, see "Using Mailboxes" in Chapter 14 of the *iNEWS Newsroom Computer System Operations Manual*.

2. Verify whether this same 3-digit number is available as a mailbox number by doing the following:

   a. Use the `list` console command to ensure no other device is using the mailbox number you have chosen.

      For instance, to check mailbox 266, type:

      `list mailbox=266 c`

      Information similar to the following appears:

```
DEV DEVICE_TYPE COMPUTER CCU PRINTER SPEED OPTIONS DEVNAME
```

n *For other `list` command options for determining mailbox assignments of queues and servers, see "Using the list Command to View Assigned Mailboxes" on page43.*

   b. If you see the device configuration header (as shown in step 2a) with no information below it, then no device has that mailbox and you can use that number. However, if configuration information for a device appears below the header, that device has the same mailbox as the one you chose. Therefore, choose another mailbox number and repeat step 2a.

n *If the mailbox number is already being used, and you must choose another, you may want to try another device number for the monitor server as well. Typically, mailbox numbers match server program device numbers, although this is not required. However, the mailbox number you select must be assigned to the queue monitored by the server program. Multiple queues can share the same mailbox number. See "Assigning the Mailbox to the Rundown Queue" on page 42 for more information.*

3. Add the monitor server to the `/site/config` file on each iNEWS Server—such as server A and server B in a dual server system— by doing the following:

c **Always back up the `/site/config` file before making any changes. See "Changing the Configuration File" in Chapter 11 of the *iNEWS Newsroom Computer System Operations Manual* for more information.**

Changing the configuration file requires the use of `ed`, the UNIX line editor. See Chapter 10 *of the iNEWS Newsroom Computer System Operations Manual for more information.*

a. At the console, select *all* iNEWS Servers. Instructions for how to do this is provided in Chapter 2 of the *iNEWS Newsroom Computer System Operations Manual*.

b. Use the `ed` command to open and edit the configuration file, by typing:

```
ed /site/config
1259
```

After you press Enter, the editor responds by displaying a number, as shown, indicating the file size expressed as the number of characters, including spaces and returns.

c. Add the monitor server's device number to the `servers` line in the host definition for the iNEWS Server that will run the monitor server program. For instance:

```
servers 261 263 265 267
```

The device number 267 is added to the `servers` line in this example.

n *Divide your server programs evenly among your iNEWS Servers to distribute the load they put on your system. For instance, put odd numbered programs on server A and even numbered ones on server B. Additionally, ensure that you also add the configuration line for the monitor server to alternate host definitions for your iNEWS Servers. This ensures it can run on the surviving computer should one of your iNEWS Servers stop functioning. A sample configuration file is provided in Appendix B; it includes pointers indicating where in the file information is added, as described in this procedure.*

Do not confuse the configuration line, which starts with `server`, and the `servers` line mentioned in 3c (page 39), which lists device numbers.

d. Add a configuration line for the monitor server in the host definition belonging to the iNEWS Server that will run the server program. This line begins with the word `server` and contains the mailbox number assigned to the monitor server.

The format for server programs' configuration lines are:

```
server <device#> <type> <mailbox> <device name>
```

Parameter	Description
`device #`	The device number assigned to the server program. This 3-digit number must also be listed in the `servers` line in a host definition.
`type`	The type of server program, such as `monitor`. Others include: `action`, `distribution`, `parallel`, `keyword`, `seek`, and so forth.
`mailbox`	The mailbox the server program uses. Valid standard mailbox numbers are 1 through 4096. This number typically matches the server program's device number.
`device name`	To give the monitor server a device name, enter that name here (up to 8 characters). If not, enter a hyphen.

Comments appearing after the semicolons (;) are optional.

The following are sample configuration lines for various server programs:

```
server    256   action       256   actphon ;action svr
server    257   distribution 257   devname1 ;dist server
server    258   parallel     258   devname2
server    259   keyword      259   key1 ;keyword server
server    260   seek         260   seek ;seek server
server    261   ftsseek      261   - ;fts searches
server    262   ftsindex     262   - ;fts indexing
server    263   print        263   - ;print server
server    264   monitor      264   - ;monitor server
server    265   monitor      265   - ;monitor server
server    266   monitor      266   - ;monitor server
server    267   monitor      267   - ;monitor server
```

Do *not* use an uppercase (**W**) in step 3e. See Chapter 10 in the *iNEWS Newsroom Computer System Operations Manual* for more information.

e. When you finish making changes to the configuration file, save your changes by typing:

   w

f. When you press enter, a number will appear, such as `1279`, indicating the file size. You can then exit the UNIX line editor by typing:

   q

4. (Optional) Test your configuration changes. See “Testing the Site Configuration File After Changing” in Chapter 11 of the *iNEWS Newsroom Computer System Operations Manual* for more information.

n *After editing the configuration file (/site/config), it should be backed up to tape. For more information about backing up site files, see the iNEWS Newsroom Computer System Operations Manual.*

Before the monitor server can be used, two more tasks must be completed:

- Reconfiguring the system to incorporate the new device (monitor server) into your system’s operation.
- Adding the monitor server’s mailbox to the rundown queue it will be monitoring.

These tasks are covered in the next two sections.

Reconfigure the System

You do not need to stop anything to reconfigure the system.

To reconfigure the system:

1. At the console, select the master computer (typically server A).
2. Type **su** to log in as superuser and type the superuser password.
3. Type:
   `NRCS-A# offline`
4. Type:
   `NRCS-A# configure`
5. When the prompt returns, bring the system online again by typing:
   `NRCS-A# online`

   A message similar to the following will appear:

```
A  Wed Oct  3 00:18:58 2001 msg System being configured
```

6. After you see the `System being configured` message, exit from superuser mode. (Ctrl+D)

Unlike other utility programs, it is not necessary to start a monitor server when you add it to the configuration file. It starts when someone uses the `monitor on` or `monitor load` command for the rundown queue to which you have assigned the monitor server.

Assigning the Mailbox to the Rundown Queue

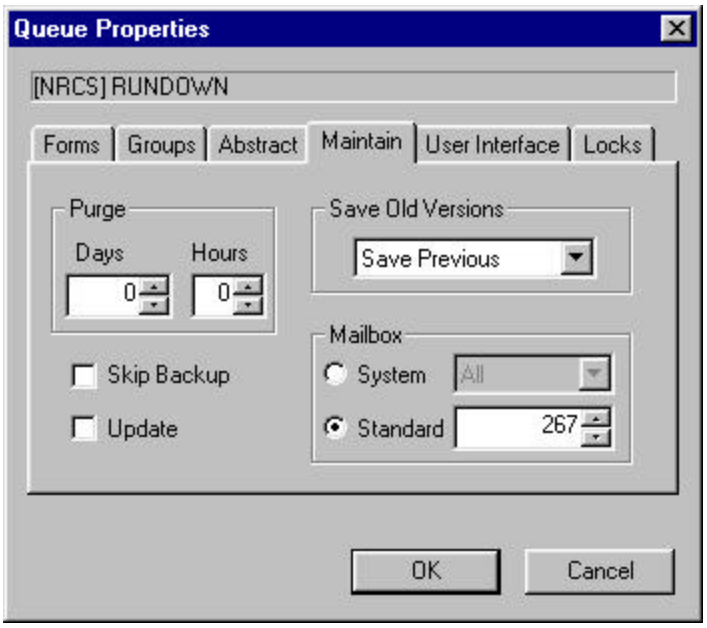
Mailboxes are assigned to queues in the same way other database traits are—using the Queue Properties dialog box. See Chapter 5 in the *iNEWS Newsroom Computer System Operations Manual* for more information.

After you choose the monitor server's mailbox number and verify that it is not used by another device, you must also assign it to the show's rundown queue, being monitored by the monitor server.

For instance, the rundown queue in the following procedure is `SHOWS.6PM.RUNDOWN`, and the mailbox being assigned is number 267.

To assign a mailbox to the rundown queue:

1. Log in as a system administrator—that is, with a superuser account—to an iNEWS Workstation.
2. Navigate to the rundown queue, such as the queue named Rundown located in the `SHOWS.6PM` directory.
3. Right-click on the queue and select Properties from the pop-up menu. The Queue Properties dialog box will appear.



4. Click on the Maintain tab.
5. Select the Standard radio button located in the Mailbox section.
6. Type in the mailbox number, such as 267.
7. Click OK to save changes.

Using the list Command to View Assigned Mailboxes

Variations of the `list` command can be used at the console to determine mailbox assignments for specific devices, queues, and so forth.

Since multiple queues can share the same mailbox, you can list all queues and directories in the database that are using a certain mailbox, such as 267. To do this, type: **`list mailbox=267 d`**

To find out which monitor server mailboxes are assigned:

t Type: **`list c monitor`**

The system displays configuration information for your system's monitor servers, similar to the following:

```
DEV DEVICE_TYPE COMPUTER CCU PRINTER SPEED OPTIONS DEVNAME
S264 monitor        A N264
S265 monitor        B N265
S266 monitor        A N266
S267 monitor        B N267
NRCS-A:
```

The mailbox number assigned to each monitor server appears in the PRINTER column and begins with the letter, N.

To see if any servers are assigned a certain mailbox number, use the following format: `list mailbox=<mailbox number> c`

For instance, to check whether mailbox 267 is assigned to a server program, type: **`list mailbox=267 c`**

Step 2: Creating Composite and Event List Queues

The monitor server scans stories for machine control events and builds lists of these events, which can be referenced or used to transmit data to production devices, such as character generators (CGs) or still stores. These lists, known as composite and event lists, are valuable resources for a show's director and production device operators. An event list contains details for a specific MOS device, while a composite list contains status information for all devices connected through MOS Gateway.

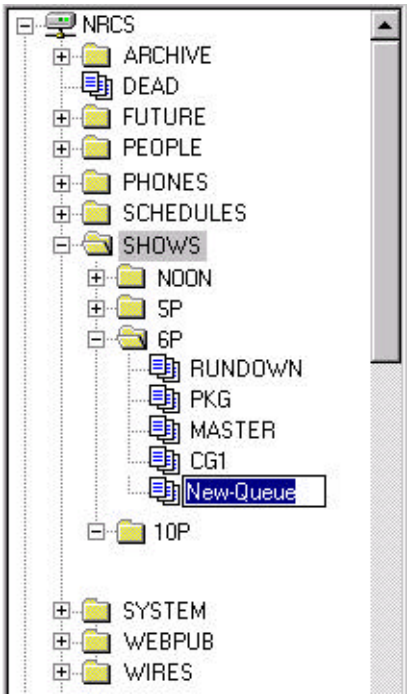
You may want to create only composite and/or event lists for certain production devices, such as MOS Gateway. If you do not create list queues for some devices, the monitor server will not create lists.

For these lists to exist, queues for them must be created—if they do not already exist—and they must be "mapped" to the monitor server so it knows where to put composite information and event lists. This step in the procedure explains how to create queues. For more on mapping, see "Create an Entry in the SYSTEM.MAP Story" on page55.

To create and configure the composite and event list queues:

1. At an iNEWS Workstation, log in as a system administrator—or user with authority to create queues in the iNEWS database.
2. Navigate to and select the directory (folder) created to hold the queue you want to create.
3. Do one of the following:
   - Click Tools > New Queue.
   - Right-click on the folder in the Directory panel, and select New Queue from the pop-up menu.

A new queue appears under the folder you selected and at the end of any list of existing queues. The title, New-Queue, is highlighted, so you can rename it.



4. Type the name of the new queue, such as **`COMPOSITE`** or **`CG1`**.

n *The pathname of each device's event list queue is a combination of the event list directory and the device manager's name. For instance, if you want an event list for the 6PM show that has a character generator called* `CG1`*, you may select to place the event list queue in the* `SHOWS.6PM` *directory (as shown above). The pathname would be* `SHOWS.6PM.CG1`*. Using the same example, the pathname for the composite list queue would be* `SHOWS.6PM.COMPOSITE`*.*

5. Press Enter to save the new queue name.

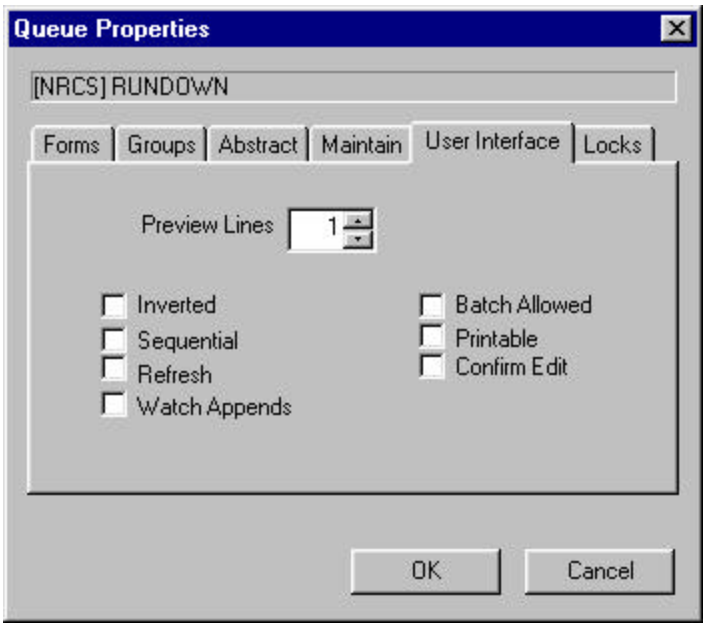
   The newly created queue will inherit database traits of its parent directory initially. You can open the new queue by double-clicking on it. For more information about queues and their database traits, see Chapter 5 in the *iNEWS Newsroom Computer System Operations Manual.*

6. To have monitor server display information in these lists properly, each queue must have a 1-line display and be assigned the proper queue form. Assigning these forms is covered in “Assigning Forms to Queues” on page53.

   To set the display of any queue, such as a composite or event list queue:, log in as a system administrator at an iNEWS Workstation, and do the following:

   a. Navigate to and right-click on the composite or event list queue in the Directory panel.

   b. Select Properties from the pop-up menu. The Queue Properties dialog box appears.



   c. Select the User Interface tab.

   d. Set Preview Lines to the number of lines you want displayed in the Queue panel.

   e. Click OK to save changes.

7. To ensure that you can use the queues effectively, remove the inverted database trait and apply the refresh database trait to them. This can be done by removing the check mark from the Inverted check box on the User Interface tab of the Queue Properties dialog box at any iNEWS Workstation.

   For more information about assigning database traits to queues, see Chapter 5 of the *iNEWS Newsroom Computer System Operations Manual.*

8. Assign a write security group to your event and composite list queues to ensure that only the monitor server makes changes to the composite and event lists. It is recommended that you restrict writing access of these queues to superusers.

   For more information on how to assign write groups to queues, see "Group Traits for the Database" in Chapter 6 of the *iNEWS Newsroom Computer System Operations Manual*.

After the composite and event list queues are created, the monitor server must be created—as described in step 1 on page 37—and mapped to them. This will enable the monitor server to determine the queue where the composite list should be placed and the directory where the event list queues are located. The procedures for mapping the monitor server to composite and event list queues are explained in "Create an Entry in the SYSTEM.MAP Story" on page55.

Step 3: Set Up Queue and Story Forms

Add MOS Gateway fields to existing rundown queue and story forms in iNEWS. These fields are explained in Table 1.

n *For a field to exist in a queue form, it must also exist in a story form. Refer to Chapter 8 in the iNEWS Newsroom Computer System Operations Manual for details on creating or modifying forms and other form field types.*

The relationship of fields pertaining to time calculations, such as RUNS-TIME and MOS-DURATION, is explained further in "Calculating Duration in Time Fields" on page 50.

Table 1 iNEWS Form Fields for MOS Gateway

Field Type	Description
MOS-ACTIVE	This field is required on the story form so a queue can display whether a MOS item, such as a Media Browse video event, is attached to a script; this is typically done by dragging and dropping the MOS item into the story form from an ActiveX plugin. The read-only field holds a short code representing certain attributes of a MOS item. If empty, no MOS item is attached.
MOS-TITLE	This read-only field is used to display a brief description—or title—of the MOS item inserted from a plugin as a primary machine control event in the story form. It is optional.
MOS-SUBEVENT	This field is used to display additional descriptive information only if the MOS item is inserted as a primary machine control event in the story form. It is optional.
MOS-DURATION	This field is used by iNEWS to display the duration time of a MOS item attached to a script through the story form. Whether any time appears in the field depends on configuration settings in the SYSTEM.MOS-MAP story created and stored in iNEWS. The field is optional and its contents are only used in calculations if the RUNS-TIME field is also present in the story form. See “Calculating Duration in Time Fields” on page 50 for more information.
EVENT-STATUS	This read-only field displays, in the rundown, the availability and play status of a machine control event or any MOS item, as reported by the production device involved. For instance, a video event could be reported as N/L (not loaded) or OFFLINE, CUED,PLAYING, or STOPPED, among other things. In forms for rundown and event list queues, only the status of a video event can be displayed. In Machine Control Terminal (MCT) and ControlAir Workstation forms, this field can also contain the status of CG and still store events. It is optional.
ITEM-CHANNEL	This read-only field is necessary only if a separate field is used to assign channels—via the Assign Channel dialog (Shift+Alt+C) in iNEWS—for playback of MOS items. It is optional.
RUNS-TIME	This field displays the sum of time in the MOS-DURATION field and all Runs times within the story, including those from MOS items inserted in the story body. It is optional, but recommended when the MOS-DURATION field is also present in the Story Form panel. See “Calculating Duration in Time Fields” on page 50 for more information.

Calculating Duration in Time Fields

Some form fields in iNEWS are dependent on others. This is primarily evident in the relationship between the RUNS-TIME field and the MOS-DURATION field. Figure1provides a visual outline of how input in certain form fields directly affects what appears in others.

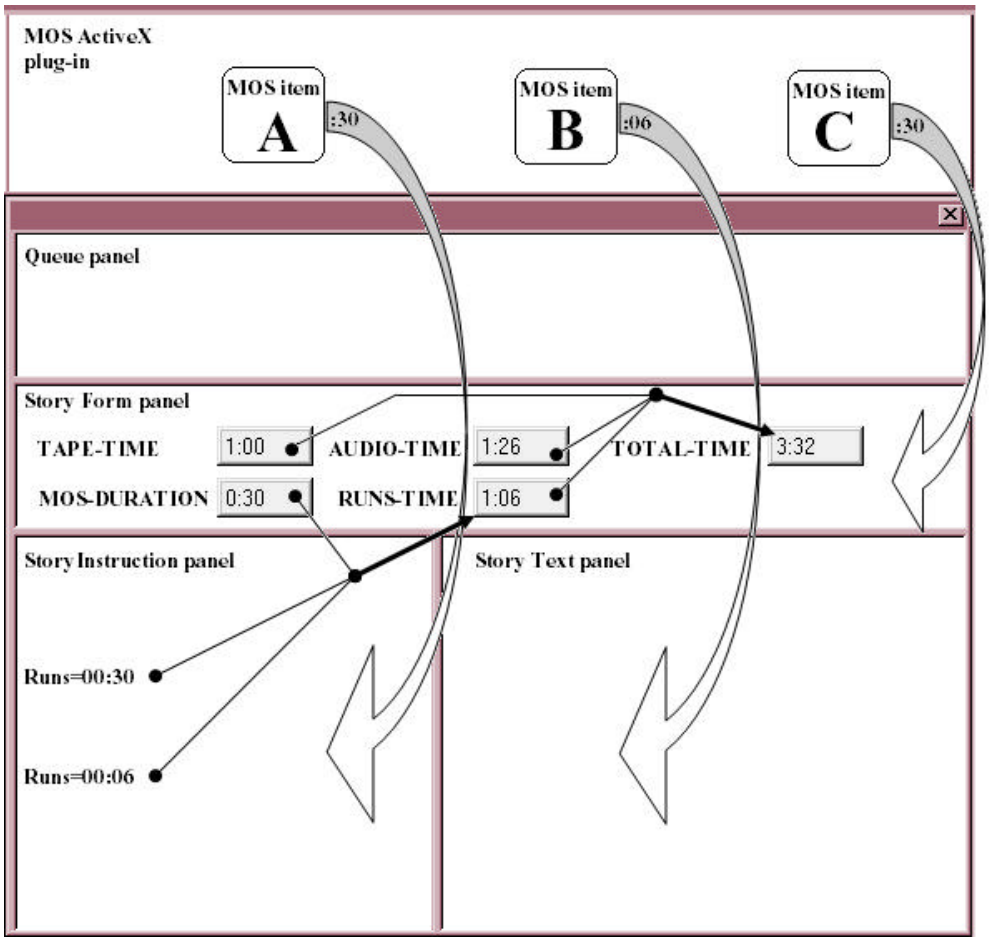


Figure 1 Relationships of Time-based Fields

In Figure1, three MOS items are inserted into the Story panel of the iNEWS Workspace. Only one—MOS item C in the example—can be dragged and dropped into Story Form panel; any additional items must be dragged and dropped into the Story Text or Instruction panels. When a

MOS item is inserted into the story, the time associated with that item may be inserted too—either appearing in the MOS-DURATION field for an item dragged to the Story Form panel, or as a Runs time shown in a machine control event in the Instruction panel. Whether a MOS item's time is inserted is determined by settings defined in the `SYSTEM.MOS-MAP` story. See "Edit the SYSTEM.MOS-MAP Story" on page 51 for more information.

If both MOS-DURATION and RUNS-TIME fields are used in the Story Form panel, then the RUNS-TIME field will display the calculated sum of time appearing in the MOS-DURATION field and all Runs times from the Instruction panel. The TOTAL-TIME field will show the calculated sum of values from the RUNS-TIME, AUDIO-TIME, and TAPE-TIME fields.

n *Users may manually enter times in the TAPE-TIME field. The time appearing in the AUDIO-TIME field is the estimated read time of the text in the Story Text panel, as calculated by the iNEWS system, according to reading speeds defined by the system administrator.*

Step 4: Edit the SYSTEM.MOS-MAP Story

The `SYSTEM.MOS-MAP` story contains a section of information, known as the DeviceTable, which consists of two columns:

- The first column has the MOS device's mosID—reported by the vendor's ActiveX control. It must match the `<mos>` value in the `mosconfig.xml` file, which is installed on the MOS Gateway Server.
- The second column has an iNEWS device name associated with the mosID to display in machine control events in the story body. It must match the `<amcp>` value in the `mosconfig.xml` file.

The following is an example of a `SYSTEM.MOS-MAP` story with a single device listed in the DeviceTable:

```
TABLE-START DeviceTable
Mos.omnibus.co.uk    OmniMOS
TABLE-END
```

n *If the* `SYSTEM.MOS-MAP` *story does not exist, it must be created in iNEWS as the first story in the MOS-Map queue in the System directory.*

The SYSTEM.MOS-MAP story may also be used to set up whether times related to MOS items are displayed in the Queue panel (rundown) or Story Form panel. It may be configured for all MOS devices or on an individual basis.

For sites that do not want MOS item information displayed—in the RUNS-TIME or MOS-DURATION fields—the system administrator must edit the SYSTEM.MOS-MAP story.

To block the display of time information from all MOS devices:

t Add the following line to the SYSTEM.MOS-MAP story in iNEWS:
`ReplaceTime=NO`

n *The line should precede the start of the DeviceTable in the story. If the* `ReplaceTime` *value is set to* `NO`*, it will apply to all devices listed within the DeviceTable.*

To exclude time information from a single device, while allowing the display of similar input for other devices:

1. In the SYSTEM.MOS-MAP story, set the `ReplaceTime` value to `YES`.
2. Append `<noDur>` to the line associated with the single device, located within the DeviceTable.

c **The `<noDur>` tag must *not* be used at sites with workstations running a version of iNEWS earlier than 1.5.1. Earlier versions of iNEWS do not recognize the tag as a command to suppress the display of duration information, but identify it as a channel for the MOS device, whether the device uses channels. Users on iNEWS Workstations running versions earlier than 1.5.1 may see `<noDur>` appear in the channel list when loading the monitor server.**

In the following example, no duration time will be displayed for the NewsQPro device.

```
ReplaceTime=YES
TABLE-START DeviceTable
;MOSID AMCPDeviceName
sony sonyem
MOSGATE qamosgw chan1 chan2 chan3
PILOT pilot
AIRSPACE airem
VERTIGO vertigo
NewsQPro NQPro <noDur>
NETIAMOS netia
TABLE-END
```

Step 5: Assigning Forms to Queues

After you create queues to hold the composite and event lists, you must assign forms containing MOS Gateway fields to each queue.

For instance:

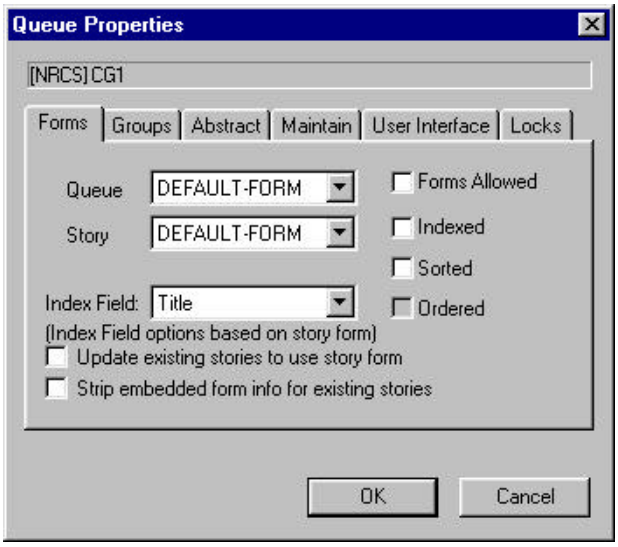
- Assign a form designed to display composite list information to `SHOWS.6PM.COMPOSITE`
- Assign a form designed to display the information in a character generator's event list to `SHOWS.6PM.CG1`

n *Your system includes default forms—located in the* `SYSTEM.FORMS` *directory—for composite, still store, character generator, and video event list queues. If upgrading to iNEWS from a previous product version, such as NetStation, you must update forms for composite and event list queues, including rundown forms.*

To assign a form to a queue:

1. At an iNEWS Workstation, navigate to the queue you want in the Directory panel.
2. Right-click on it. A pop-up menu will appear.

3. Select Properties. The Directory/Queue Properties dialog box will appear.



n *Access to the Directory/Queue Properties dialog box and its appearance vary, depending on certain circumstances. See Chapter 5 of the iNEWS Newsroom Computer System Operations Manual for more information.*

4. Do either or both of the following:
   - Use the Queue drop-down list on the Forms tab to select the form you want to apply to the directory as queue form database trait.
   - Use the Story drop-down list on the Forms tab to select the form you want to apply to the directory as story form database trait.
5. If you made changes to an existing form, you must select the Update existing stories to use story form. When this check box is selected, iNEWS changes the story form assignment for previously existing stories with the queue.
6. Click OK to save changes and apply the new queue/story form settings.

n *Users should log off and sign back on to view the new queue/story form settings.*

You must assign a queue form and a story form. The queue form determines the look of the queue. The story form determines how an event request is displayed when you double-click it.

For instance, to assign the standard composite list queue form to the `SHOWS.6PM.COMPOSITE` queue, select `mcs-composite` from the Queue drop-down list in the Queue Properties dialog box. To assign a story form to this composite list, select `mcs-composite` from the Story drop-down list in the Queue Properties dialog box.

n *The forms will only appear in the drop-down lists if they exist in the database. For information about how to create your own forms or modify existing forms, and about database traits, see the iNEWS Newsroom Computer System Operations Manual.*

Step 6: Create an Entry in the SYSTEM.MAP Story

The *map story* is a standard iNEWS database story and is always the first story in the `SYSTEM.MAP` queue. It can be opened and edited like any other iNEWS database story; however, access to it is typically limited to system administrators who already have access to the System directory.

When you create a show's map story entry, you will usually specify that monitor server create and maintain event and composite lists when someone monitors the show.

n *On a small system, the work required to update composite and event lists could affect overall system performance. In these cases, specify in the show's* `SYSTEM.MAP` *story entry that monitor server should not create composite and event lists, or that it create one and not the other.*

After creating the show's monitor server, add an entry for the show to your system's map story. This entry specifies to the show's monitor server the location of the show's rundown queue, and composite and event lists. Without this information, the monitor server will not create lists.

The map story entry also specifies the list of groups that can monitor a queue, and when the monitor server turns itself off.

To add an entry for the show in the map story:

1. Open the SYSTEM.MAP story, which contains a separate entry for each show that will be produced using MOS Gateway or ControlAir.

n *ControlAir is another Avid product that works with the iNEWS newsroom computer system to control production devices, such as character generators, still stores, and video playback machines.*

Figure 2 shows three sample entries in a SYSTEM.MAP story.

Each show's map story entry must begin with a line called an entry header.

The entry header must be followed by a device list.

```
; RUNDOWN            EVENT DIR      COMP DIR         GROUP    (OFF TIME)
;DEVICE                DEVNAME UPDATE MCT TEMPLATE              (MSG DIR)
;
SHOW.10P.RUNDOWN   SHOW.10P   SHOW.10P.COMPOSITE   -   130
ss            ss@bcssvr-1,bcssvr-2     UPDATE  bcs-bcw
cg            cg@bcssvr-1,bcssvr-2     UPDATE  bcs-bcw  C:NAB:300 499
cart          pdr@bcssvr-1,bcssvr-2    UPDATE  bcs-bcw  3
mos           sony@mosgwy              UPDATE  bcs-bcw  -
;
;
SHOW.6P.RUNDOWN    SHOW.6P   SHOW.6P.COMPOSITE   -   2100
ss            ss@bcssvr-1,bcssvr-2     UPDATE  bcs-bcw
cg            cg@bcssvr-1,bcssvr-2     UPDATE  bcs-bcw  C:NAB:500 699
cart          pdr@bcssvr-1,bcssvr-2    UPDATE  bcs-bcw  3
mos           sony@mosgwy              UPDATE  bcs-bcw  -
;
;
SHOW.SPECIALS.RUNDOWN    SHOW.SPECIALS   SHOW.SPECIALS.COMPOSITE   -   130
ss            ss2@bcssvr-1,bcssvr-2    UPDATE  bcs-bcw
cg            cg2@bcssvr-1,bcssvr-2    UPDATE  bcs-bcw  C:NAB:300 499
cart          pdr2@bcssvr-1,bcssvr-2   UPDATE  bcs-bcw  3
mos           sony@mosgwy              UPDATE  bcs-bcw  -
```

Figure 2 Sample Map Story

2. Create an entry header.

   As shown in Figure3, the entry header specifies the following information for each show:

   - The show's rundown queue
   - The directory where you want to hold the event list queues

- The composite list queue
- Groups of users who can monitor the show
- The time you want the monitor to turn itself off—when you want the system to stop monitoring the show

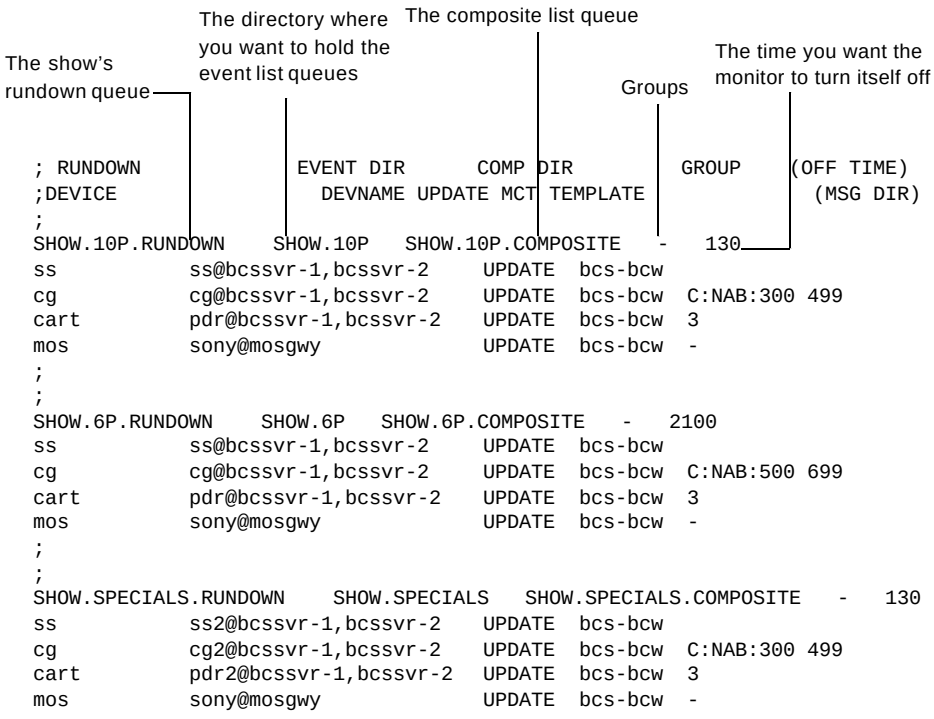

The show's rundown queue
The directory where you want to hold the event list queues
The composite list queue
Groups
The time you want the monitor to turn itself off
; RUNDOWN EVENT DIR COMP DIR GROUP (OFF TIME)
;DEVICE DEVNAME UPDATE MCT TEMPLATE (MSG DIR)
;
SHOW.10P.RUNDOWN SHOW.10P SHOW.10P.COMPOSITE - 130
ss ss@bcssvr-1,bcssvr-2 UPDATE bcs-bcw
cg cg@bcssvr-1,bcssvr-2 UPDATE bcs-bcw C:NAB:300 499
cart pdr@bcssvr-1,bcssvr-2 UPDATE bcs-bcw 3
mos sony@mosgwy UPDATE bcs-bcw -
;
;
SHOW.6P.RUNDOWN SHOW.6P SHOW.6P.COMPOSITE - 2100
ss ss@bcssvr-1,bcssvr-2 UPDATE bcs-bcw
cg cg@bcssvr-1,bcssvr-2 UPDATE bcs-bcw C:NAB:500 699
cart pdr@bcssvr-1,bcssvr-2 UPDATE bcs-bcw 3
mos sony@mosgwy UPDATE bcs-bcw -
;
;
SHOW.SPECIALS.RUNDOWN SHOW.SPECIALS SHOW.SPECIALS.COMPOSITE - 130
ss ss2@bcssvr-1,bcssvr-2 UPDATE bcs-bcw
cg cg2@bcssvr-1,bcssvr-2 UPDATE bcs-bcw C:NAB:300 499
cart pdr2@bcssvr-1,bcssvr-2 UPDATE bcs-bcw 3
mos sony@mosgwy UPDATE bcs-bcw -

Figure 3 Sample Entry Header

n *The entire entry header must be in a single paragraph in the map story, and is limited to 255 characters. Any text that does not fit within this limit is not read by the monitor server. If your site's rundown, event list, and composite list queue names are very long, you might have to shorten the names to get them to fit.*

You must specify the parameters in the entry header in the order indicated in Table2.

Table 2 Entry Header Parameters

Parameter	Definition
Rundown Queue	The full pathname of the show's rundown queue.
Event List Directory	(Optional) The directory in which event lists are stored. The monitor server combines information you put here with the device name. For instance, if you specify `SHOWS.6PM` here and you have a still store machine called "ss1," the monitor server puts the still store's event list in `SHOWS.6PM.SS1`. It is a good idea to use the same directory that holds the show's rundown. If you do not use this field, put a dash here.
Composite List Queue	(Optional) The queue in which the show's composite list is stored. It is a good idea to put the composite list in the same directory as the show's rundown queue. If you do not use this field, put a dash here.
Group of Users	(Optional) Put a security group in this field so that only superusers and people assigned to that group can monitor the show. Put a dash here if you do not want to restrict who can monitor the show. Consider using different security groups for each show in a series of back-to-back shows to prevent one show's producer from starting or stopping another show's monitor server.

Table 2 Entry Header Parameters

Parameter	Definition
Quit Time	The time you want the show's monitor server to turn itself off. You can enter this time as either a time of day or a duration. Enter the time of day in 24-hour format. For instance, type **1915** to have the monitor server turn itself off at 7:15 PM. Enter a duration by typing **D** before the value. For instance, enter a duration of one hour and 30 minutes as **D130**. (These values are not case-sensitive.)

3. List the devices used by the show.

   You must follow the entry header with a device list that identifies production devices for which you want the show's monitor server to process event requests. See Figure4

n *The production device name—which is shown as* `sony@mosgwy` *in* Figure 4 *contains two parts. The first part that precedes the at (@) symbol must match the* `<amcp>` *value in the* `mosconfig.xml` *file; in the example, the value is* `sony`*. The second part of the name must match the hostname of the computer with MOS Gateway's IP address, as identified in the* `/etc/hosts` *file on the iNEWS Server. In the example, the hostname is* `mosgwy`*. A complete sample of the* `/etc/hosts` *file is provided in AppendixB. See also step 7 on page 62 for more information on that file. See Chapter5 for more information on the MOS configuration file, called* `mosconfig.xml`*.*

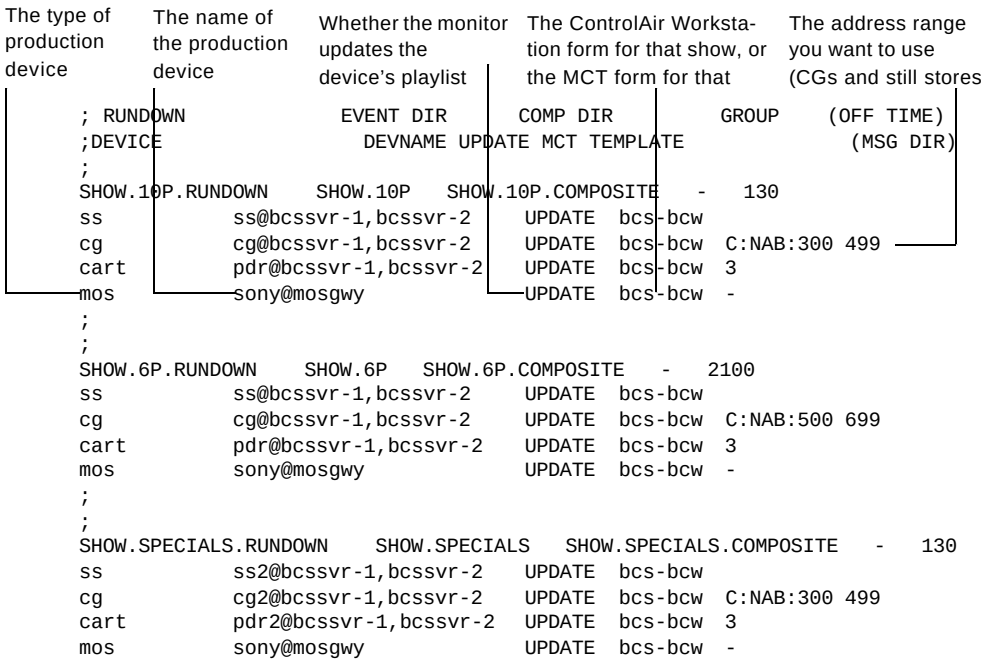

The type of production device
The name of the production device
Whether the monitor updates the device's playlist
The ControlAir Workstation form for that show, or the MCT form for that
The address range you want to use (CGs and still stores
; RUNDOWN EVENT DIR COMP DIR GROUP (OFF TIME)
;DEVICE DEVNAME UPDATE MCT TEMPLATE (MSG DIR)
;
SHOW.10P.RUNDOWN SHOW.10P SHOW.10P.COMPOSITE - 130
ss ss@bcssvr-1,bcssvr-2 UPDATE bcs-bcw
cg cg@bcssvr-1,bcssvr-2 UPDATE bcs-bcw C:NAB:300 499
cart pdr@bcssvr-1,bcssvr-2 UPDATE bcs-bcw 3
mos sony@mosgwy UPDATE bcs-bcw -
;
;
SHOW.6P.RUNDOWN SHOW.6P SHOW.6P.COMPOSITE - 2100
ss ss@bcssvr-1,bcssvr-2 UPDATE bcs-bcw
cg cg@bcssvr-1,bcssvr-2 UPDATE bcs-bcw C:NAB:500 699
cart pdr@bcssvr-1,bcssvr-2 UPDATE bcs-bcw 3
mos sony@mosgwy UPDATE bcs-bcw -
;
;
SHOW.SPECIALS.RUNDOWN SHOW.SPECIALS SHOW.SPECIALS.COMPOSITE - 130
ss ss2@bcssvr-1,bcssvr-2 UPDATE bcs-bcw
cg cg2@bcssvr-1,bcssvr-2 UPDATE bcs-bcw C:NAB:300 499
cart pdr2@bcssvr-1,bcssvr-2 UPDATE bcs-bcw 3
mos sony@mosgwy UPDATE bcs-bcw -

Figure 4 Sample Device List

The last parameter of a device list line—Drive, Directory/User#, and so forth—is defined in Table3.

Table 3 Device List Line Parameters

Parameter	Definition
Parameters for Character Generators:	
Drive	Select the disk drive you want the machine to use. If you leave this field empty, the machine uses its default drive.
Directory/User#	Select the directory you want the character generator to use.

Table 3 Device List Line Parameters (Continued)

Parameter	Definition
Address/Stack	Specify a range of addresses in this field. The monitor server uses this range to store the forms it builds. To specify a range of addresses, enter the starting address, followed by a space and the ending address. For instance, to reserve addresses 1 through 199, type **`1 199`** in this field. The range of numbers must be large enough to hold all character-generated graphics—also known as supers—that monitor server is likely to build for the show. Also, ensure you do not select a range that conflicts with the addresses the character generator uses to store its permanent supers or CG forms.
Parameters for Still Stores:	
Drive	Select the disk drive you want the machine to use. If you leave this field empty, the machine uses its default drive.
Directory/User#	If your still store machine has user numbers, use this field to specify the user number you want to use for that show.
Address/Stack	Specify the stack you want the still store to use in this field.
Parameters for Video Machines:	
Channel Assignment	This parameter specifies whether the iNEWS system, the ControlAir Workstation, the device manager, or the video (cart) device assigns channels. Use these codes: 0 to have channels assigned by device 1 to have channel assigned by iNEWS 2 to have channels assigned by device manager 3 to have channels assigned by ControlAir Workstation

Table 3 Device List Line Parameters (Continued)

Parameter	Definition
Parameters for MOS Devices:	
None at Present	Put a dash (-) in this field.

4. Save the map story.
5. Test monitor the show to ensure map story entries are functioning correctly.

The monitor server only examines the show's map story entry when a user turns it on, so any changes to the show's map story entry will not take effect until then. Changes made to the show's map story entry after the show is monitored do not take effect until the next time the show is monitored.

For this reason, you should monitor the show after creating or modifying the show's map story entry to test the changes you make. Monitoring the show allows the monitor server to check your work and ensures smooth operation when you produce the show.

Step 7: Adding IP Addresses for the MOS Gateway

To enable monitor server to communicate with MOS Gateway, the IP address of the MOS Gateway Server must be added to all iNEWS Servers' `/etc/hosts` files.

Ideally, all MOS Gateway Servers and iNEWS Servers would have each other's addresses and computer names. See "Adding IP Addresses on MOS Gateway Server" on page 24 for more information. The following procedures explain how to add the MOS Gateway IP addresses to the iNEWS Servers.

n *To maximize reliability and minimize latency, MOS Gateway should be installed on the Mirror Net of the iNEWS hosts, and static IP addresses should be used in* `/etc/hosts` *files. This will avoid dependence on DHCP or DNS servers.*

c **Always back up the `/etc/hosts` file before editing.**

To add IP addresses to all iNEWS Servers' `/etc/hosts` files:

1. Select *all* servers at the console. Instructions for how to do this is provided in Chapter 2 of the *iNEWS Newsroom Computer System Operations Manual.*
2. Type **`su`** to log in as superuser and type the superuser password.

These steps require the use of `ed`, the UNIX line editor. For more information, see Chapter 10 of the *iNEWS Newsroom Computer System Operations Manual.*

3. Type **`ed /etc/hosts`**

   This command launches the UNIX line editor, and positions the cursor at the end of the `/etc/hosts` file, which contains a list of IP addresses, computer names, and comments, such as:

```
125.1.0.1       NRCS-A   nrcs-a nrcs-a.yourdomain.com
125.1.0.2       NRCS-B   nrcs-b nrcs-b.yourdomain.com
```

n *A sample `/etc/hosts` file is provided in Appendix B.*

4. Add addresses to the file by doing the following:
   a. Type **`a`** and press Enter to append information to the file.
   b. Enter IP addresses, computer names, and comments, such as:

```
125.1.10.50    MOSGWY mosgwy #MOS Gateway machine
```

   c. Type a period (**`.`**) to stop appending information to the file.
   d. (Optional) Type **`p`** to print the appended file and verify your changes.
   e. Save the file by typing **`w`**.
   f. Quit `ed` by typing **`q`**.

   The following example shows the UNIX line editing commands used in step 4 along with explanations (appearing in parentheses after the command):

```
a                (begins append mode)
125.1.10.50  MOSGWY    mosgwy    # MOS Gateway
125.1.10.60  MG1       mg1       # MOS Gateway Server1
125.1.10.70  MG2       mg2       # MOS Gateway Server2
.                (ends append mode)
p                (prints appended file)
```

(backup MOS Gateway)

Do *not* use an uppercase **W**.

```
w       (saves changes by writing the file to the disk)
362     (ed responds by displaying file size)
q       (quits the edit session)
```

Step 8: Updating the iNEWS System Dictionaries (Optional)

Machine Control System (MCS) dictionary files in iNEWS can be modified to customize the appearance of status indicators from various devices. Dictionary files are located in the `/site/dict` directory.

For instance, an Omnibus device, connected to iNEWS, shows a video play-back status of “OnAir,” but the status field in the show rundown on iNEWS shows “Play” instead. If the system administrator wants the two status indicators to match, the MCS dictionary file in iNEWS must be modified. This will “translate” the iNEWS status wording so that it corresponds to what appears on the actual device.

Editing the /site/dict/mcs Dictionary File

In the following procedure, as an example, the term “Play” is changed to “OnAir” in the dictionary.

To edit the dictionary file:

1. Select *all* servers at the console, so changes you make are made to each server’s copy of the file. See “Selecting One or More Servers” in Chapter 2 of the *iNEWS Newsroom Computer System Operations Manual* for more information.

This procedure uses the UNIX line editor. For more information, see Chapter 10 of the *iNEWS Newsroom Computer System Operations Manual*.

2. Open `/site/dict/mcs` for editing by typing:
   `ed /site/dict/mcs`
3. Navigate to the line with the word you want changed, such as “PLAY” by typing:
   `/PLAY`

   The console will respond with a display similar to the following:

   ```
   A_CAPLAY      /PLAY
   ```

   In the above example, PLAY appears twice in the line.

n *When navigating in the file, remember the UNIX line editor is case-sensitive. So, typing either* **`/Play`** *or* **`/play`** *will not locate a line with "PLAY."*

4. Substitute the new word, such as "OnAir," for the second occurrence of the existing word, PLAY, by typing:

   `s?/PLAY?/OnAir`

   The console will respond with a display similar to the following:

   `A_CAPLAY  /OnAir`

n *The question marks are necessary to prevent the editor from substituting "OnAir" in place of the first occurrence of the word, "PLAY." For instance, typing* **`s/PLAY/OnAir`** *would result in the edited line appearing as* **`/A_CAOnAir  /PLAY`**.

Do *not* use an uppercase (**`W`**) in step 5. See Chapter 10 in the *iNEWS Newsroom Computer System Operations Manual* for more information.

5. When you finish making changes to the dictionary file, save your changes by typing:

   `w`

6. When you press enter, a number will appear, such as `1279`, indicating the file size. You can then exit the UNIX line editor by typing:

   `q`

n *See Appendix C in the iNEWS Newsroom Computer System Operations Manual for more information about Dictionary files.*

If you change your existing MCS dictionary files, you must apply those changes by running the `makemctab` command at the iNEWS console; however, any monitor servers that are running at the time the command is entered will not apply the changes. The monitor servers must be stopped prior to running the `makemctab` command.

c **A system administrator who knows the device numbers for monitor servers can choose to stop just those programs; however, it should be done only during off-peak hours, when the monitor servers are not used to monitor on-air shows.**

To update your iNEWS dictionaries:

The prompt endings change from a colon (:)—indicating a system operator login—to a pound sign (#)—indicating a superuser login.

1. Select *all* servers.
2. At the console, type **su** to become a superuser and type the superuser password. The prompts will appear as follows:

   ```
   NRCS-A: su
   Password:
   NRCS-A#
   ```

   For security reasons, the console does not display the password you type.
3. Idle the system, by doing the following:
   a. Type **offline** to take the system offline.

      The `offline` command prevents users from logging in.

   b. Type **broadcast** followed by the message warning users already logged in that processes will be stopped. Include the time the system will be shut down. Here is an example:

      ```
      NRCS-A: broadcast WARNING!Log out in 5 Min.
      ```

   The `broadcast` command broadcasts a message to all users logged in at present.
4. At the specified time, select *one* server and type the command **list s** to check who is still logged in and which server programs are still running.

   A message similar to the following appears:

```
S264      2Af4          B
T11       miller        A
T82       allen         B
T101      stevens       A
R801      stevens       A
```

The `list s` command displays the device controlling the session, the user account used for the session, and the server servicing the session. In the example, the first line starts with an S, indicating a server (utility) program, such as a monitor server. The 3-digit number after the S is the device number.

5. Select *all* servers.
6. Type **`logout all`** to log out all users. If a user is editing a story, this saves the file and logs out the user.
7. Type **`list s`** again to check for connect session users.

   The `logout all` console command does not log out users who are currently in a connect session.

   ```
   NRCS-A: list s
   T101  stevens       A
   R801  stevens       A
   ```

   If any users are still logged in, notify them of the shutdown by some other means, such as by telephone.

C **If a user is in a connect session when you shut down the system, the user's workstation stops, the session is disconnected, and any unsaved work is lost. Ensure any connect session users have logged out before you continue the shutdown procedure.**

8. Type **`stop all`** to stop all server programs, including monitor servers.
9. Type **`maketab -i`** to build command and message tables and translate dictionaries for the iNEWS newsroom computer system.
10. Type **`makeccutab -i`** to build the command and error message table for the PCU dictionaries and then display how much space is unused in them.
11. Type **`makemctab -i`** to translate dictionaries used by monitor servers.
12. Type **`restart all`** to start all server programs, including monitor servers.
13. Type **`online`** to bring the iNEWS system back online, allowing users to log back in.

Step 9: Configure iNEWS for MOS Replication (Optional)

MOS replication requires some configuration on the iNEWS Server that includes:

- Adding a COM session to the iNEWS Server license. Contact Avid to purchase the COM session and have Customer Support add it to your iNEWS Server license.
- Creating an iNEWS user account for MOS replication.
- Creating a write group for MOS replication.
- Creating device-specific queues to store replicated MOS items.
- Ensuring the correct database traits and forms are assigned to the queues.
- Ensuring that write permissions are assigned to the group containing only the MOS replication user account for all device-specific queues that will store replicated MOS items. All other iNEWS users should have read-only permission to those queues.

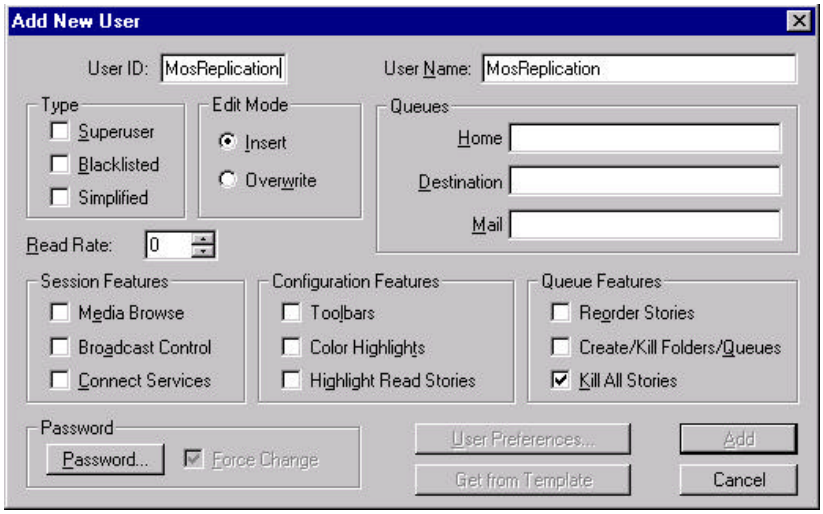
n *Other configuration required for MOS replication, which must be done on the MOS Gateway Server, is explained in Chapter5 See “Using the MosAdmin Application” on page 91 for more information.*

To create an iNEWS user account for MOS replication:

For more information about creating iNEWS user accounts, see Chapter 4 of the *iNEWS Newsroom Computer System Operations Manual*.

1. Log in to an iNEWS Workstation, using an account capable of creating new users on the system.
2. Select Tools > Options > Users.

3. Click New User. The Add New User dialog box appears.



4. In the User ID field, enter the login name of the user account, such as **`MosReplication`**.

n *The User Name is optional and may be the same as the User ID. There is no need to assign Home, Destination, or Mail queues to a MOS replication user account. The User ID and password created in iNEWS must match exactly those values entered in the <ncs> group of the MOS configuration file. See "The <ncs> Group" on page 83 for more information.*

5. Click Password to set the password for logging in.

c **Because the Force Change option for passwords is selected by default for all new users, and MOS replication is an automated process, that option must be removed after creating the account. See step 8.**

6. Ensure Kill All Stories in the Queue Features section is checked.
7. Click Add.
8. Reopen the user account's preferences and remove the Force Change password option by doing the following:
   a. Select Tools > Options > Users.
   b. Type in the User ID and click Search.

c. When the results appear, double-click on the name to open and modify the preferences.

d. Uncheck the Force Change check box.

e. Click OK.

To create a write group for MOS replication:

For more information on creating groups in iNEWS, see Chapter 6 of the *iNEWS Newsroom Computer System Operations Manual*.

1. Choose a name for the group, such as `mosreplication`.
2. Ensure the chosen name is not already used by the system by using a variation of the `gtraits` command at the iNEWS console.

   For instance, type:

   ```
   NRCS-A# gtraits list mosreplication
   mosreplication is not a user or group name
   ```

   In the example, the system response indicates that mosreplication is not being used; you should receive a similar response before proceeding.
3. Use the `gtraits add` command to enter the new group name into the iNEWS system.

n *For more information about using the iNEWS console, see Chapter 2 of the iNEWS Newsroom Computer System Operations Manual. For more information about the iNEWS Workstation and the panels of the iNEWS Workspace, see the iNEWS Newsroom Computer System Training Manual.*

4. Add *only* the MOS replication user account to the group, by doing the following:

   a. At an iNEWS Workstation, log in as a system administrator—that is, use an account capable of accessing the System directory.

   b. Navigate to the System folder in the Directory panel.

   c. Open the Groups queue.

   d. Create a new story by selecting File > New Story or using the Insert key.

      In the Queue panel, a blank row appears in the group list, and a blank story appears in the Story panel of the iNEWS Workspace.

e. Type the new group name, such as **mosreplication**, in the Title (Slug) field of the Queue panel or in the corresponding field in the Story Form panel.

f. Press Enter.

g. Click inside the Story Text panel and type the group name and membership list in the following format:

```
group mosreplication

mosreplication
```

h. Select File > Save Story.

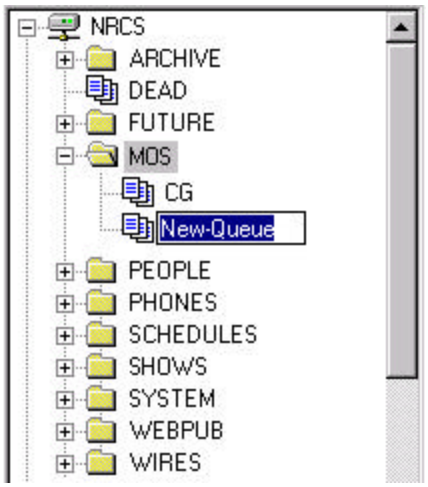
The above procedure creates a story, stored in `SYSTEM.GROUPS`, that bears the group name and contains the membership list for that group. The iNEWS system will refer to the story anytime its group is applied to security measures or other system features.

To create device-specific queues for MOS replication:

For more information on creating directories and queues in iNEWS, see Chapter 5 of the *iNEWS Newsroom Computer System Operations Manual*.

1. Log in as a system administrator—using a superuser account—unless you have write-access to the parent directory and queues. This ensures that you have full access to the iNEWS database.
2. In the Directory panel, navigate to the folder in which you want to create the device-specific queues. If it does not exist, create it, using the Tools > New Folder menu option.
3. Do one of the following:
   - Select Tools > New Queue.
   - Right-click on the folder in the Directory panel, and select New Queue from the pop-up menu.

A new queue appears under the selected folder and at the end of any existing queues in that folder. The title, New-Queue, is highlighted so you can rename it.



4. Type the name of the device-specific queue, such as **VIDEO**.
5. Press enter to save the new queue name.

n *The newly created queue will inherit the database traits of its parent directory initially. You can view the new queue's properties by right-clicking on it and selecting Properties from the pop-up menu. All queues created in iNEWS to store replicated MOS items must have the Batch Allowed database trait and appropriate queue and story forms. Ensure these settings are correct by configuring the queue's properties, as explained in the following procedure. If all device-specific queues for MOS replication are located in the same folder, the properties may be set at the directory level.*

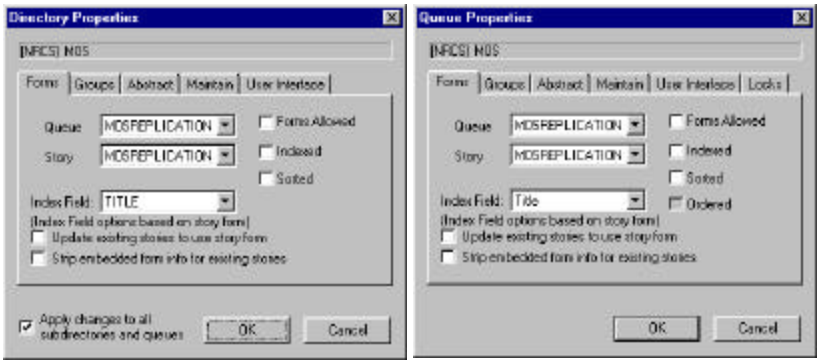
To configure properties of MOS replication device-specific queues:

For more information about configuring database traits of directories and queues in iNEWS, see Chapter 5 of the *iNEWS Newsroom Computer System Operations Manual*.

1. Log in as a system administrator—using a superuser account—unless you have write-access to the parent directory or queue. This ensures that you have full access to the iNEWS database.
2. In the Directory panel, navigate to the queue and right-click on it.
3. Select Properties from the pop-up menu.

n *To configure database traits for all queues in a directory, right-click on the parent folder instead of an individual queue and then select Properties from the pop-up menu. Make any necessary configuration changes and ensure the check box labeled Apply changes to all subdirectories and queues is selected before clicking OK.*

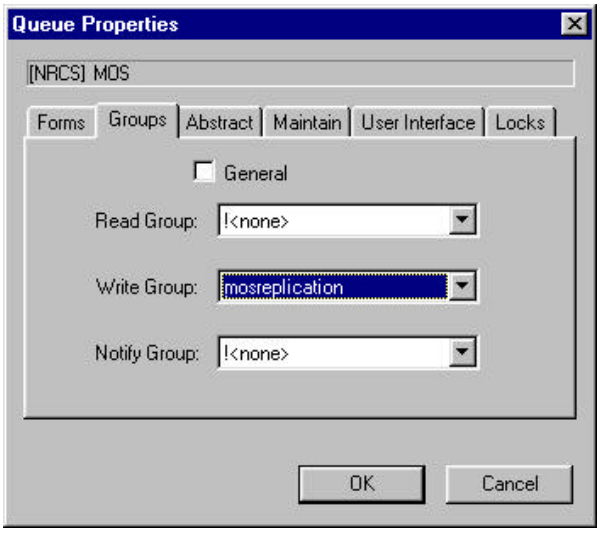
The dialog box that appears will vary depending on whether you right-clicked on a directory or a queue.



4. On the Forms tab of the Directory/Queue Properties dialog box, ensure the correct Queue and Story forms are selected. For MOS replication, this is usually a form called `MOSREPLICATION`.

n *The `MOSREPLICATION` form is a queue located in the `SYSTEM.FORMS.M` directory of iNEWS. It contains three stories that define the format by which MOS items are replicated—to the story form, to the body of the story, or to both. If the `MOSREPLICATION` form and its stories do not exist in the iNEWS database, the iNEWS system administrator must create them, using information provided in Appendix B. See “MOSREPLICATION Form” on page 127 for more information.*

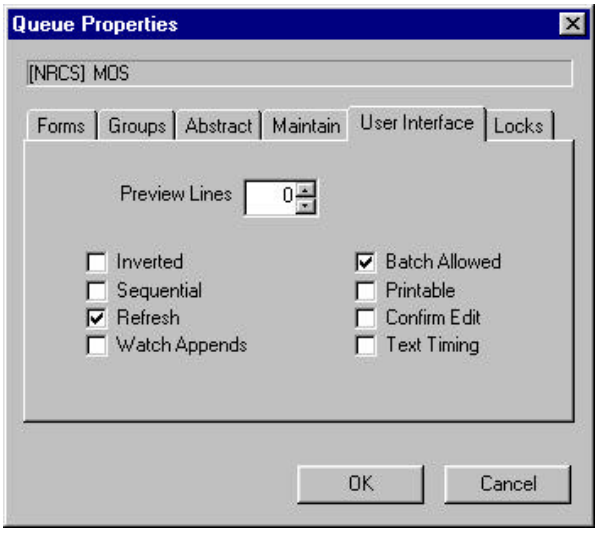
5. On the Groups tab, ensure the MOS replication group is selected as the Write Group.



n *If the appropriate group does not appear as an option in the list, it must be created in* SYSTEM.GROUPS*; the procedure for creating the group is on page 70.*

It is not necessary to assign any Read or Notify groups; leave them set to !<none>.

6. On the User Interface tab, ensure that Refresh and Batch Allowed are selected.



7. Click OK to save changes and apply settings.

n *Selecting and/or unselecting check boxes in the Directory/Queue Properties dialog box does not apply changes immediately. Only step 7 does that.*

Chapter 5

Configuring MOS Gateway

MOS Gateway must be configured to communicate with various MOS devices. This requires changes to be made in both the iNEWS Server and MOS Gateway.

This chapter contains the following major sections:

- MOS Gateway Configuration File
  - Editing the Configuration File
  - Configuration File Components Explained
- Adding MOS Devices to the SYSTEM.MOS-MAP Story
- Moving the Configuration File

MOS Gateway Configuration File

MOS Gateway must be configured with information about each MOS device that will connect to it. This is done by editing the MOS Gateway configuration file, which is installed on the MOS Gateway Server.

During installation, the configuration file, which is named `mosconfig.xml`, is placed, by default, in the following location:
`C:\Program Files\Avid\MOSGateway`

n *The actual location may vary since the name of the folder—MOS Gateway—and its location in the iNEWS directory can be changed during the installation.*

c **Before editing the configuration file, it is highly recommended that you make a backup copy.**

Editing the Configuration File

The MOS Gateway configuration file is saved as a Unicode file, not a standard ASCII text file. You must use an editor that can process Unicode files to edit it. The Windows Notepad executable program (`notepad.exe`) will edit Unicode files, so its use is recommended for editing the MOS Gateway configuration file.

n *While MOS Gateway is running, the configuration file is locked by the MosConfigService. Before editing the configuration file, ensure that MOS Gateway is stopped. For more information on the MosConfigService and procedures on stopping and starting MOS Gateway, see* *"Stopping and Starting MOS Gateway" on page 79**.*

To edit the configuration file:

1. Open Notepad.

n *The Notepad program may typically be launched using the Start button on the Windows Task bar—for instance, select Start > Programs > Accessories > Notepad. The Notepad window opens.*

2. Select File > Open.
3. Navigate to the configuration file at:
   `C:\Program Files\Avid\MOSGateway`
4. Make the changes you want to the file. For more information on what can or should be modified in the file, see "Configuration File Components Explained" on page 80.
5. When you are done, select File > Save.

Stopping and Starting MOS Gateway

After editing the MOS Gateway configuration file, you must restart all MOS Gateway services that run on the MOS Gateway Server. Those services—in the order they should be started—are:

See "MOS Gateway Components" on page100 for more information.

- MOSConfigService
- MOS Gateway Logger
- MOS Gateway License Server
- MOSReplicationService
- MOSRouterService
- MOSAdminService

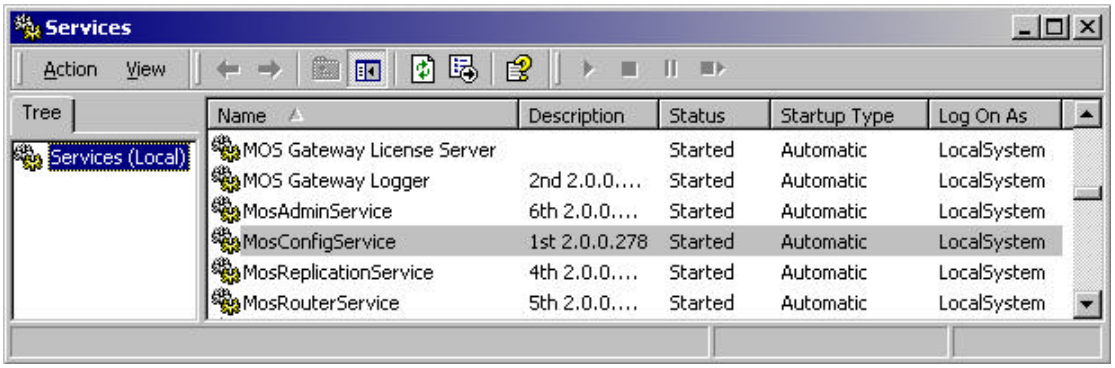
n *When stopping services manually, the order is reversed. For instance, MOSAdminService must be stopped before MOSRouterService, and so forth, with the last service being MOSConfigService.*

To stop and restart services:

Graphics for the following procedure show views similar to those of Windows 2000 and Windows XP operating systems. Steps may vary slightly, depending on the OS.

1. At the MOS Gateway Server, click the Start button on the Windows Task bar.
2. Select Settings > Control Panel. The Control Panel window opens.
3. Open Adminstrative Tools, then Services.

The Services dialog box will appear.



4. Select the MOSConfigService.
5. Select Action > Stop.

   This will stop all MOS Gateway services in the proper order.
6. Restart the services by selecting the MOSAdminService, then select Action > Start.

   This will start all MOS Gateway services in the proper order.
7. Click Close.

Configuration File Components Explained

In this section, lines of the MOS Gateway configuration file are shown in groups; each group of lines is a section of the file that can or should be modified to configure the MOS Gateway to work with MOS devices at your site. The section pertaining to replication with a newsroom computer system is located between lines with `<ncs>` and `</ncs>`. The section pertaining to devices is located between lines with `<listDevices>` and `</listDevices>`. Each group describing a particular MOS device is located between lines with `<mosDevice>` and `</mosDevice>`. The information that should be modified appears in **bold**. An explanation of how to modify the information follows each group.

n *If only one MOS device is used, all other `<mosDevice>` groups should be removed. This helps reduce the MOS Gateway's workload.*

The <logging> Group

```
<logging>
    <directory>DIRECTORY_GOES_HERE</directory>
    <maxFileCount>COUNT_GOES_HERE</maxFileCount>
    <maxFileBytes>SIZE_GOES_HERE</maxFileCount>
    <winDebugTrace>WINDEBUGTRACE_YESNO</winDebugTrace>
    <socket>SOCKET_ONOFF</socket>
</logging>
```

The `DIRECTORY_GOES_HERE` should be changed to the directory in which the MOS Gateway will save its log files.

The `COUNT_GOES_HERE` should be changed to the maximum number of log files that the MOS Gateway will create before recycling them.

The `SIZE_GOES_HERE` should be changed to the maximum size each log file can be, such as 1000000 (which equals about 1MB).

n *Specify values that will not overflow the available storage space. For instance, if you set the maximum file count to 100 and the maximum file size to 1000000 bytes, ensure that you have 100 MB of free space in the logging directory.*

The `WINDEBUGTRACE_YESNO` should be changed to `YES` if logging should be sent to the global Win32 debug subsystem. This is useful if the system has a Win32 debugger that can display statements in real time.

Socket logging can affect performance, so it should not be left on all the time.

The `SOCKET_ONOFF` should be changed to `ON` if socket level log files are required. Socket logging logs all incoming socket messages in network byte order. The logs are used when a device is sending data that the MOS Gateway cannot handle. Each connected device and port has its own socket log, created in the logging directory, as indicated by the MOS configuration file.

The file name of the log is created using the mosID of the device to which MOS Gateway is connected and a string that represents the connection type, according to the following format:
`[mosID][space][LM|UR][space][NCSInit|MOSInit].bin`

- LM means "Media Object Metadata port"

- UR means "Running Order port"
- NCSInit means the MOS Gateway made the connection
- MOSInit means the MOS Device made the connection

For example:

```
VideoDevice LM MOSInit.bin
CGMos UR NCSInit.bin
SSDevice2 LM NCSInit.bin
```

The <tcpPorts> Group

```
<tcpPorts>
    <upper>MOS_OUT_UPPER_PORT_GOES_HERE</upper>
    <upper>MOS_OUT_LOWER_PORT_GOES_HERE</upper>
    <lower>MOS_IN_UPPER_PORT_GOES_HERE</lower>
    <lower>MOS_IN_LOWER_PORT_GOES_HERE</lower>
</logging>
```

The `MOS_OUT_UPPER_PORT_GOES_HERE` should be changed to the port on which the MOS Gateway will send running order MOS commands. The recommended value is 10541.

The `MOS_OUT_LOWER_PORT_GOES_HERE` should be changed to the port on which the MOS Gateway will send media object metadata MOS commands. The recommended value is 10540.

The `MOS_IN_UPPER_PORT_GOES_HERE` should be changed to the port on which the MOS Gateway will receive running order MOS commands. The recommended value is 10541.

The `MOS_IN_LOWER_PORT_GOES_HERE` should be changed to the port on which the MOS Gateway will receive media object metadata MOS commands. The recommended value is 10540.

n *Running order connections are referred to as upper ports in MOS protocol. Media object metadata connections are referred to as lower ports in MOS protocol. Port settings apply to MOS devices intended for use with MOS Gateway. All MOS devices must use these same ports to connect to MOS Gateway.*

The <ncs> Group

```
<ncs>
    <ncsID>NCS_ID_GOES_HERE</ncsID>
    <host>HOST_GOES_HERE</host>
    <AllowReplication>ALLOW_YESNO</AllowReplication>
    <ReplicationUsername>USER_GOES_HERE</ReplicationUsername>
    <ReplicationPassword>PUT_PASSWORD_HERE</ReplicationPassword>
</ncs>
```

The NCS_ID_GOES_HERE should be changed to the NCS ID of the iNEWS Server to which devices will be replicating MOS objects—typically, this ID is identical to the iNEWS Server's host name.

The HOST_GOES_HERE should be changed to the network host name of the iNEWS Server to which devices will be replicating MOS objects. Verify that the server with this host name can be pinged from the MOS Gateway Server.

The ALLOW_YESNO should be changed to YES if devices are to replicate data to queues on the newsroom computer system. If this line does not appear in the configuration file, the default is YES. If set to NO replication is prevented and MOS objects are dropped at the MOS Gateway.

The USER_GOES_HERE should be changed to the User ID that the replication service will use to replicate MOS objects to the iNEWS Server. This user must exist on the newsroom computer system and have write permissions to the queues to which the devices will replicate their data.

The PUT_PASSWORD_HERE should be changed to password set for the user identified on the <REPLICATIONUSERNAME> line. It must also match the one set for that user on the newsroom computer system.

n *For more information on configuring the iNEWS newsroom computer system to support MOS replication, see "Configure iNEWS for MOS Replication (Optional)" on page68.*

The <names> Group

```
<names>
    <mos>MOS_ID_GOES_HERE</mos>
    <amcp>iNEWS_DEVICE_GOES_HERE</amcp>
    <network>NETWORK_NAME_GOES_HERE</network>
</names>
```

The MOS_ID_GOES_HERE should be changed to the MOS ID reported by the MOS device. This ID identifies the MOS device to the MOS Gateway and is used in MOS items placed in an iNEWS rundown to indicate which MOS device receives the items.

n *Refer to the manufacturer's documentation provided with the device for more configuration details, such as the MOS ID.*

The iNEWS_DEVICE_GOES_HERE should be changed to the iNEWS device name for the MOS device. It is the same name that appears in the SYSTEM.MOS-MAP story located in the iNEWS database. See "Edit the SYSTEM.MOS-MAP Story" on page 51 and "Adding MOS Devices to the SYSTEM.MOS-MAP Story" on page95 for more information.

The NETWORK_NAME_GOES_HERE should be changed to the network (host) name of the MOS device. Contact your network administrator for this information.

The <roSlugMaps> Group

The <iNewsRunning OrderName> tags should be on the same line in the actual file, not wrapped as appears here.

```
<roSlugMaps>
    <roSlugMap>
        <iNewsRunningOrderName>INEWS_RO_NAME</iNewsRunni
        ngOrderName>
        <MOSroSlug>MOS_RO_NAME</MOSroSlug>
    </roSlugMap>
</roSlugMaps>
```

The group allows the name of a running order sent to a particular MOS device to be different than the running order's name in the iNEWS Server. This is useful in cases where the MOS device provides a small space for the running order name, such as the text on a button. If the entire group is missing or a particular name for a rundown is missing, MOS Gateway will

send to the MOS device a default running order name, consisting of the iNEWS Server name followed by a forward slash (/) and the iNEWS rundown's full queue name. For instance, if the server's name is NRCS and the rundown queue is `SHOW.11PM.RUNDOWN`, then MOS Gateway will send the running order name as: `NRCS/SHOW.11PM.RUNDOWN`.

The `INEWS_RO_NAME` string should be changed to the iNEWS running order name.

The `MOS_RO_NAME` string should be changed to a MOS device's running order name.

The <handlesEmptyStories> Group

```
<handlesEmptyStories>YESNO</handlesEmptyStories>
```

The `YESNO` should be changed to `YES` if the MOS device manages stories with no items the same way it handles stories that do have items. Some MOS vendors do not handle stories with no items as the MOS Protocol specifies; for these devices, `YESNO` should be set to `NO`.

For instance, `Table4` gives the standard settings for two MOS devices.

Table 4 handlesEmptyStories

MOS Device	handlesEmptyStories Setting
Sony® MAV Server	NO
OmniBus™ Columbus	YES

If the `<handlesEmptyStory>` parameter is absent from the file, the system defaults to `YES`.

The <handlesRoStoryMoveMultiple> Group

```
<handlesRoStoryMoveMultiple>YESNO</handlesRoStoryMoveMultiple>
```

The `YESNO` should be changed to `YES` if the MOS device supports the `roStoryMoveMultiple` MOS command; when set to `YES`, MOS Gateway will use the `roStoryMoveMultiple` command to move stories in the running order. The default is `YES`.

The <handlesRoItemLevelCommands> Group

```
<handlesRoItemLevelCommands>YESNO</handlesRoItemLevelCommands>
```

The YESNO should be changed to YES if the MOS device supports the roItemInsert, roItemDelete, and roItemReplace MOS commands; when set to YES, MOS Gateway will use those commands to move items in stories. The default is YES.

The <prependPageNumber> Group

```
<prependPageNumber>YESNO</prependPageNumber>
```

The YESNO should be changed to YES if the iNEWS story's page number is prepended to the story title—commonly known as the slug.

The <prependSeparator> Group

```
<prependSeparator>-</prependSeparator>
```

The hyphen (-) should be changed to the chosen character used to separate the story title and the page number. The default is a hyphen.

The <prependStringForEmptyPageNumber> Group

```
<prependStringForEmptyPageNumber>XXX</prependStringForEmpty
PageNumber>
```

The XXX should be changed to string of characters used in place of an empty page number.

The <statusTranslations> Group

```
<statusTranslations>
    <statusUnknown>UNKNOWN_STR</statusUnknown>
    <statusUnavailable>UNAVL_STR</statusUnavailable>
    <statusAvailable>AVAIL_STR</statusAvailable>
    <statusIncomplete>INCOMP_STR</statusIncomplete>
    <statusCueing>CUEING_STR</statusCueing>
    <statusCued>CUED_STR</statusCued>
    <statusPlayRequested>P_STR</statusPlayRequested>
    <statusPlaying>PLAYING_STR</statusPlaying>
    <statusPaused>PAUSED_STR</statusPaused>
    <statusStopped>STOP_STR</statusStopped>
</statusTranslations>
```

The iNEWS Server expects one of ten event status codes to be returned as the status of a MOS item. Since the MOS Protocol specifies a string as the status of a MOS item in the `roItemStat` MOS command, MOS Gateway must map these strings to the iNEWS event status codes. Furthermore, different MOS devices use different strings to mean the same concept. The `<statusTranslations>` group specifies which string to map to each event status code.

n *There can be multiple strings that map to the same event status code, in which case, the relevant line of the* `<statusTranslations>` *group is duplicated and each string recorded.*
For instance: `<statusCued>READY</statusCued>` *and* `<statusCued>ON LINE</statusCued>` *may both appear in the* `<statusTranslations>` *group for a particular MOS device. Status codes vary with each MOS device, so refer to the manufacturer's documentation provided with the device for more configuration details.*

The `UNKNOWN_STR` should be changed to the string the MOS device reports if it is unable to determine the presence or absence of the MOS item media.

The `UNAVL_STR` should be changed to the string the MOS device reports if the MOS item media is absent.

The `AVAIL_STR` should be changed to the string the MOS device reports if the MOS item media is present and ready to play.

The `INCOMP_STR` should be changed to the string the MOS device reports if the MOS item media is partially present. An example is media is being transferred from another machine and the transfer is not complete.

The `CUEING_STR` should be changed to the string the MOS device reports when a request to cue a MOS item has been received.

The `CUED_STR` should be changed to the string the MOS device reports when the MOS item media has been cued.

The `P_STR` should be changed to the string the MOS device reports when a request to play a MOS item has been received.

The PLAYING_STR should be changed to the string the MOS device reports when the MOS item media is playing or on-air.

The PAUSED_STR should be changed to the string the MOS device reports when the MOS item media is paused.

The STOP_STR should be changed to the string the MOS device reports when the play of the MOS item media has been halted.

The <mosObjReplication> Group

```
<mosObjReplication>
    <trigger>TRIGGER_TYPE</trigger>
    <replicationTime>REP_TIME</replicationTime>
    <clearQueue>TRUE_FALSE</clearQueue>
    <path>PATH_TO_QUEUE</path>
    <mosItemBrowserProgID>xxx.xxx.xxx</mosItemBrowserProgID>
    <mosItemEditorProgID>yyy.yyy.yyy</mosItemEditorProgID>
    <mosItemPlayerProgID>zzz.zzz.zzz</mosItemPlayerProgID>
</mosObjReplication>
```

The first four settings in the <mosObjReplication> group are configured by the MosAdmin application, so there is *no need* to manually edit them in the MOS Gateway configuration file. See “Using the MosAdmin Application” on page91 for more information. The procedure for configuring replication is provided on page 93.

The MOS item settings are optional since not all MOS devices have them, but if used the ProgID values must be manually entered in the MOS Gateway configuration file. If they are not defined in the configuration file, then users will be unable to right-click on a production cue or story form to open the ActiveX controls. For examples of the most commonly used ProgIDs, see Table5 on page89.

n *If the settings are manually edited, then MOS Gateway services must be stopped and restarted. See “Stopping and Starting MOS Gateway” on page79 for more information.*

The TRIGGER_TYPE may be set to MANUAL or SCHEDULED.

The REP_TIME should be set to the time of day when MOS replication should occur. This line is only necessary if the trigger is set to scheduled replication.

The TRUE_FALSE value should be set to TRUE if all stories are to be cleared from the queue in the iNEWS database before replication is performed. If set to FALSE stories will not be cleared from the database before MOS replication occurs.

The PATH_TO_QUEUE should identify the device's queue to which Media Object Metadata (MOM) is replicated. Each device must have a unique queue; devices cannot share the same queue.

The XXX.XXX.XXX should be replaced with the ProgID of the ActiveX Browser.

The YYY.YYY.YYY should be replaced with the ProgID of the ActiveX Editor.

The ZZZ.ZZZ.ZZZ should be replaced with the ProgID of the ActiveX Player.

Table5 shows the most common values for MOS item ProgIDs:

Table 5 ProgIDs

AirSPACE		
	Browser	Avid.AirSPACEBrowser.1
	Editor	Avid.AirSPACEEditor.1
Aprisa		
	Browser	ASTILLSTOREMOSACTIVEX.SSItemBrwsrCtl.1
	Editor	ASTILLSTOREMOSACTIVEX.SSItemEditorCtl.1
	Player	ASTILLSTOREMOSACTIVEX.SSItemPlayerCtl.1

Table 5 ProgIDs

GVG News Q Pro		
	Browser	GVG.XMOSCtrl.1
Omnibus		
	Browser	OmnibusODCLauncher.Launcher
	Editor	OmniBusItemEdit.Edit
Thunder		
	Editor	ThunderX.ThunderXCtrl.1
VizRT		
	Browser	VCPAxFiller.VCPTemplateFiller
	Editor	VCPAxFiller.VCPTemplateFiller

Using the MosAdmin Application

The MosAdmin application provides a graphical user interface (GUI) that can be run locally or remotely to configure replication options for all devices connected to the MOS Gateway.

n *Some configuration for replication must be done on iNEWS Servers. That is explained in "Configure iNEWS for MOS Replication (Optional)" on page68 in Chapter4*

To launch the MosAdmin application:

1. Double-click the MosAdmin's shortcut icon—shown at left—located on the desktop.

The MosAdmin window appears, with two tabbed options:

- Status – See Figure5

  The Status tab is a read-only tab showing incoming MOS objects, being replicated from the MOS device to the iNEWS Server. This information is also logged into text files by the MOS Gateway Logger.

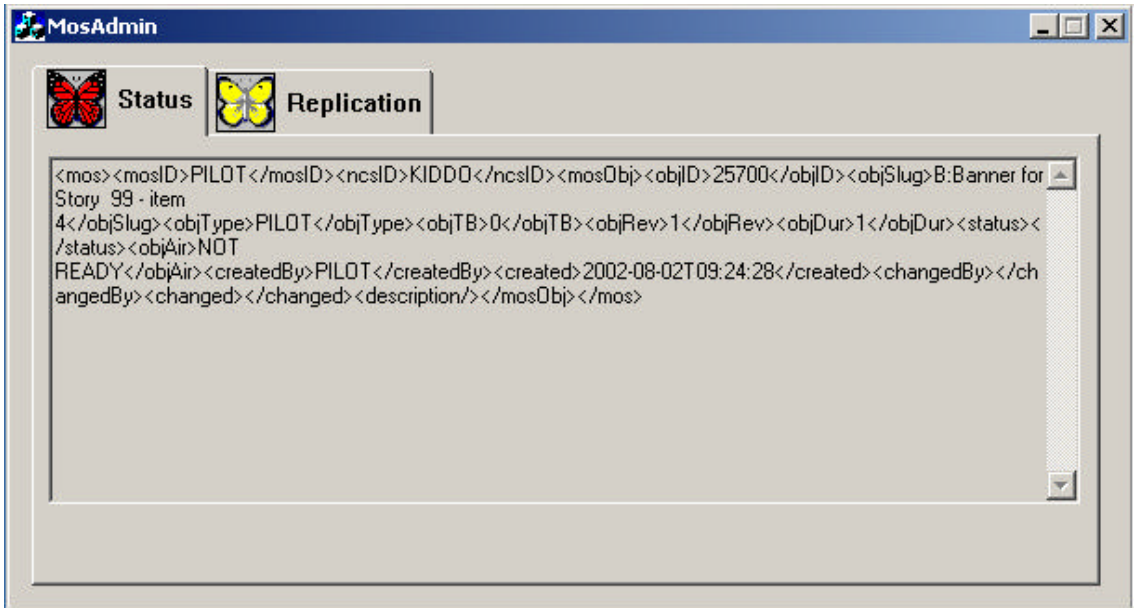
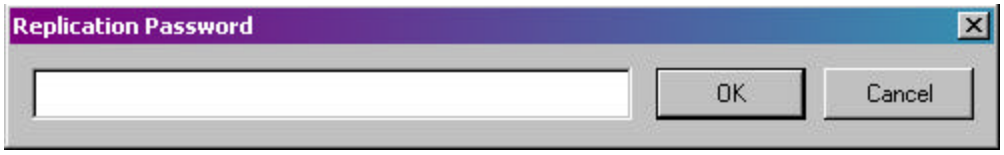


Figure 5 MosAdmin Status Tab

- Replication – See Figure 6" on page93.

  The Replication tab shows a list of devices—obtained from the `mosconfig.xml` file—and the current replication configuration settings for each device.

  Before the Replication tab may be viewed, a dialog box appears, prompting the user for a password.



  Type in the password, which should be the same one defined in the MOS configuration file and used by the `MOSReplication` user account in iNEWS.

n *The password is required to help prevent unauthorized use of the MosAdmin application.*

  On the Replication tab, the trigger can be set to either schedule replication at a set time every day or to perform replication manually by clicking a button. Changing this setting alters what appears in the Trigger column of the MosAdmin application and in between the <trigger> and </trigger> tags in the configuration file.

  A check box can be set to clear all stories from the queue in the iNEWS database before performing replication. This check box determines whether TRUE or FALSE appears in the Clear column of the MosAdmin application, and in between the <clearQueue> and </clearQueue> tags in the configuration file.

A Path text field specifies the queue in the iNEWS database to which media object metadata will be replicated. The queue's pathname appears in the Directory column of the MosAdmin application and in between the `<path>` and `</path>` tags in the configuration file.

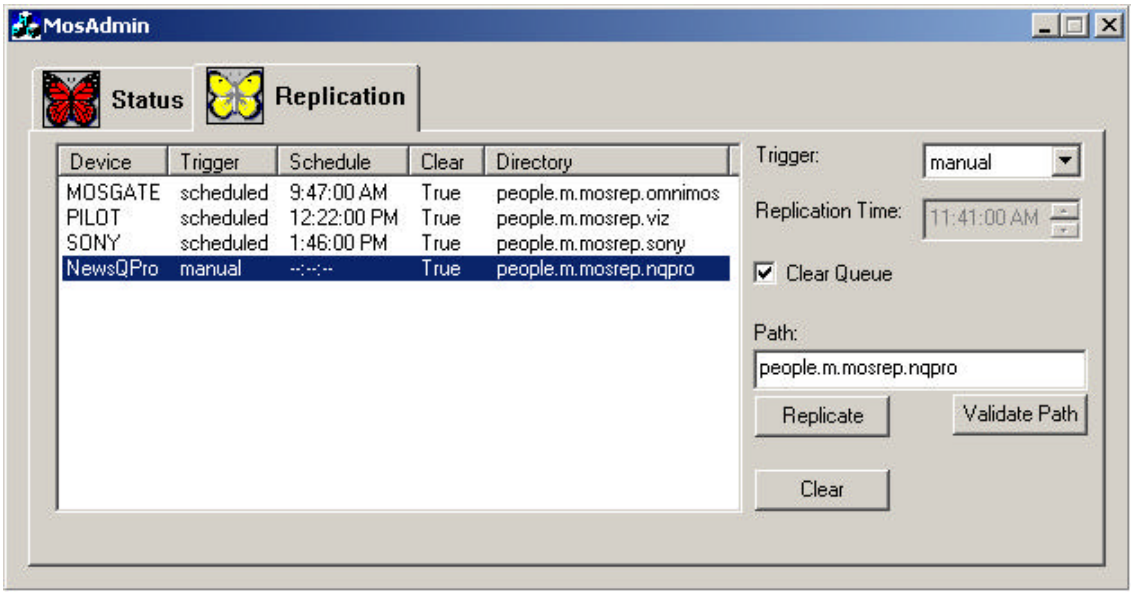


Figure 6 MosAdmin Replication Tab

To configure replication for a device:

1. Select the device from the list on the Replication tab in the MosAdmin window.
2. Select the trigger type—either manual or scheduled. If scheduled is selected, continue to step 3; otherwise, skip to step 4.
3. Set a replication time—this is the time replication is set to occur each day, if the scheduled trigger type is selected.
4. Select the Clear Queue check box to clear the iNEWS queue before replication. Checking the box is recommended.
5. Type the path to the device's queue—created on the newsroom computer system—where the replicated MOS objects will be placed.

- *The path must be unique to that device because each device must have its own queue for storing replicated MOS objects. Devices cannot share the same replication queue.*

The <roChannels> Group

```
<roChannels>
   <roChannel>
      <iNewsChannel>INEWS_CHAN1</iNewsChannel>
      <MosDevChannel>MOS_CHAN1</MosDevChannel>
   </roChannel>
   <roChannel>
      <iNewsChannel>INEWS_CHAN2</iNewsChannel>
      <MosDevChannel>MOS_CHAN2</MosDevChannel>
   </roChannel>
   <roChannel>
      <iNewsChannel>INEWS_CHAN3</iNewsChannel>
      <MosDevChannel>MOS_CHAN3</MosDevChannel>
   </roChannel>
</roChannels>
```

A MOS device may have one or more channels. Users can specify a channel to use for producing the show when they load a show to a MOS device.

Channel names within the iNEWS Workstation are restricted to seven characters or less; however, this limit does not apply to all MOS devices. So, it is possible that channel names will vary accordingly. For this reason, there is a group of lines in the MOS Gateway configuration file that maps the iNEWS channel name to the channel name accepted by the MOS device. The group consists of one or more `<roChannel>` lines, each containing values on an `<iNewsChannel>` line and a `<MOSDevChannel>` line.

The `INEWS_CHAN` string should be changed to a channel name no more than seven characters long. This string is also inserted in the `SYSTEM.MOS-MAP` table; for more information, see “Adding MOS Devices to the SYSTEM.MOS-MAP Story” on page95.

The `MOS_CHAN` string should be changed to a channel name for the MOS device.

Adding MOS Devices to the SYSTEM.MOS-MAP Story

The iNEWS system must associate the MOS ID of a MOS device with an iNEWS device name. This is because machine control commands in a story must be associated with an iNEWS device name, so the monitor server can load them to the correct device. The iNEWS Workstation uses the association to create machine control commands from MOS items that it receives from the ActiveX control associated with the MOS device.

The iNEWS system administrator creates the association by creating a table in the `SYSTEM.MOS-MAP` story, located in the System directory of the iNEWS database. The table has the following form:

```
TABLE-START DeviceTable
MOSGATE.omnibus omnimos    chan1      chan2
Ncsgateway.sony sonymos    region1    region2    region3
TABLE-END
```

The table contains at least two columns of names separated by white space. The first column is the MOS ID of a MOS device; this must match the name that appears for that device in the MOS Gateway configuration file between the `<mos>` and `</mos>` tags.

The second column is an iNEWS device name, which can have no more than eight characters; this must match the name that appears for that device in the MOS Gateway configuration file between the `<amcp>` and `</amcp>` tags. See “The <names> Group” on page84 for more information.

The table need not contain more than two columns if users are not allowed to specify the channel on which the MOS device broadcasts the show. However, if users are allowed to specify the channel, all available channels for the MOS device must be listed in additional columns on the line for that MOS device. If channels are specified, then when a user loads the show, the workstation will display the options listed in columns 3, 4, 5, and so forth. The user selects one on which to broadcast the show.

Moving the Configuration File

MOS Gateway is configured by filling in values in the MOS Gateway configuration file. A default copy of this file is installed in the same directory as MOS Gateway executable files.

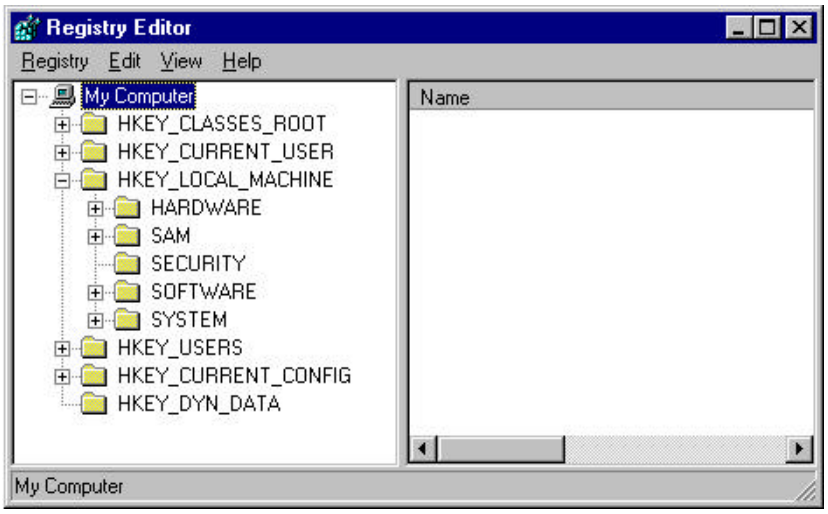
n *A sample copy of the MOS Gateway configuration file appears in Appendix B. See “MOS Gateway Configuration File” on page78 for more information.*

MOS Gateway looks for an environment variable in the Registry of the MOS Gateway Server to discover where the file is located.

To change the location of the MOS Gateway configuration file:

1. Click the Start button on the Windows Task bar.
2. Select the Run option.
3. Type **`regedit`** in the dialog box that appears.

   The Registry Editor window will appear.



4. Navigate to the following folder (also called a key):
   `HKEY_LOCAL_MACHINE\`
   `SOFTWARE\`
   `Avid Technology\`
   `MOSGateway`
5. Right-click on the ConfigFile value in the right side of the Registry Editor window (under the Name column).
6. Select Modify from the pop-up menu.
7. Replace the existing file path with the one for the new MOS Gateway configuration file.

Chapter 6

Troubleshooting

This chapter contains information to help you recover from various types of system failures. This chapter contains the following major sections:

- MOS Gateway Components
- Where to Look For Errors
  - Error Categories

MOS Gateway Components

MOS Gateway consists of three services (utility programs):

- The MOS Gateway Logger, which creates log files
- The MOS Gateway License Server, which controls the licensing of MOS Gateway
- The MOS Gateway Router, which routes messages between iNEWS Servers and MOS devices
- The MOS Gateway Replication Service, which controls the replication of MOS objects from a MOS device to the iNEWS Server
- The MOS Gateway Administration Service, which is the delegate between the `MosAdmin` utility and the MOS Gateway Router Service
- The MOS Gateway Configuration Service, which reads and writes to the MOS Gateway configuration file

MOS Gateway consists of two utilities:

- `LicenseManager`, which sets and retrieves the license string
- `MosAdmin`, which displays incoming MOS objects, being replicated from the MOS device to the iNEWS Server, and provides a graphical user interface for configuring replication. See “Using the MosAdmin Application” on page 91.

Where to Look For Errors

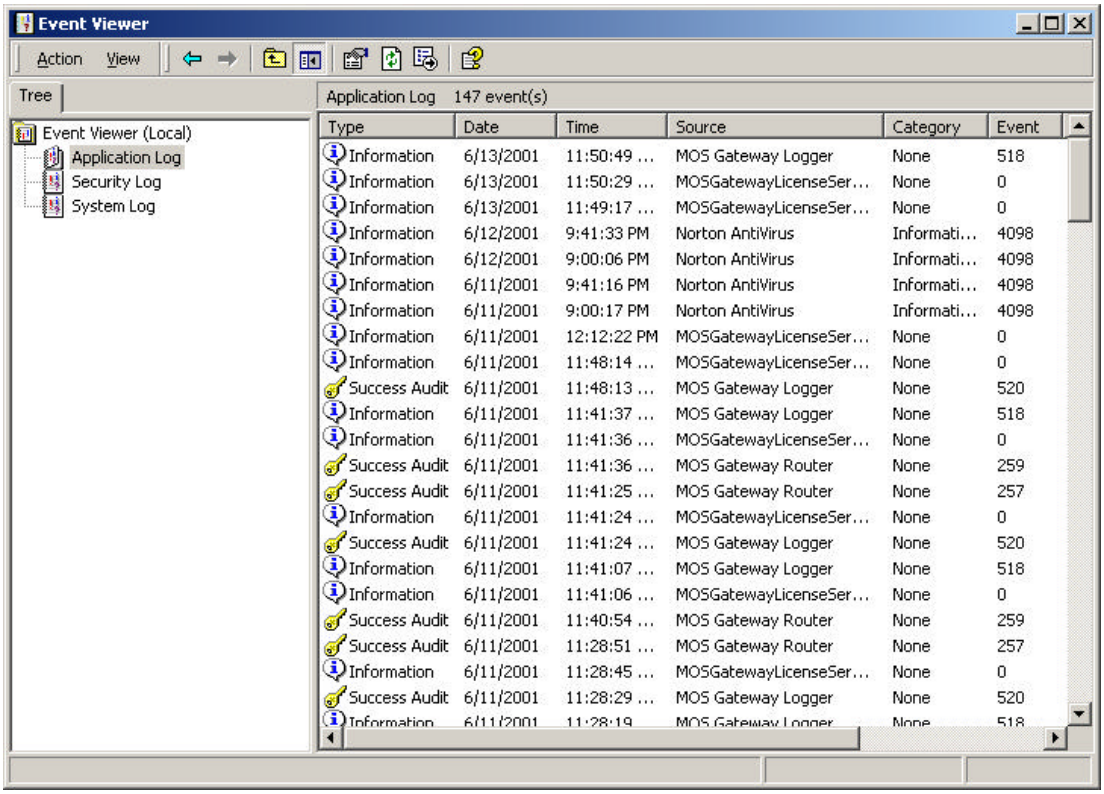
Each MOS Gateway service writes errors in one of two places:

- Log files located in the Log File directory, as specified in the MOS Gateway configuration file
- The Application log of events

Log files are text files, which can be opened with Notepad. To view these files, open Windows Explorer and navigate to the directory where MOS Gateway was installed.

To view the Application log:

1. Click the Start button on the Windows Task bar.
2. Select Settings > Control Panel. The Control Panel window appears.
3. Open Administrative Tools.
4. Click on Event Viewer to open. The Event Viewer window appears.


Event Viewer
Action View
Tree
Application Log 147 event(s)
Event Viewer (Local)
Application Log
Security Log
System Log
Type Date Time Source Category Event
Information 6/13/2001 11:50:49 ... MOS Gateway Logger None 518
Information 6/13/2001 11:50:29 ... MOSGatewayLicenseSer... None 0
Information 6/13/2001 11:49:17 ... MOSGatewayLicenseSer... None 0
Information 6/12/2001 9:41:33 PM Norton AntiVirus Informati... 4098
Information 6/12/2001 9:00:06 PM Norton AntiVirus Informati... 4098
Information 6/11/2001 9:41:16 PM Norton AntiVirus Informati... 4098
Information 6/11/2001 9:00:17 PM Norton AntiVirus Informati... 4098
Information 6/11/2001 12:12:22 PM MOSGatewayLicenseSer... None 0
Information 6/11/2001 11:48:14 ... MOSGatewayLicenseSer... None 0
Success Audit 6/11/2001 11:48:13 ... MOS Gateway Logger None 520
Information 6/11/2001 11:41:37 ... MOS Gateway Logger None 518
Information 6/11/2001 11:41:36 ... MOSGatewayLicenseSer... None 0
Success Audit 6/11/2001 11:41:36 ... MOS Gateway Router None 259
Success Audit 6/11/2001 11:41:25 ... MOS Gateway Router None 257
Information 6/11/2001 11:41:24 ... MOSGatewayLicenseSer... None 0
Success Audit 6/11/2001 11:41:24 ... MOS Gateway Logger None 520
Information 6/11/2001 11:41:07 ... MOS Gateway Logger None 518
Information 6/11/2001 11:41:06 ... MOSGatewayLicenseSer... None 0
Success Audit 6/11/2001 11:40:54 ... MOS Gateway Router None 259
Success Audit 6/11/2001 11:28:51 ... MOS Gateway Router None 257
Information 6/11/2001 11:28:45 ... MOSGatewayLicenseSer... None 0
Success Audit 6/11/2001 11:28:29 ... MOS Gateway Logger None 520

5. Select the Application Log item in the left-hand panel.

The Event Viewer shows a table of events, sorted from most to least recent. The Source column displays the application name that created the event. MOS Gateway services appear in this column.

Double-clicking on an event opens the Event Properties/Details dialog box, containing a description of the event.

Figure 1 shows how this dialog box appears on a computer running the Windows 2000 operating system.

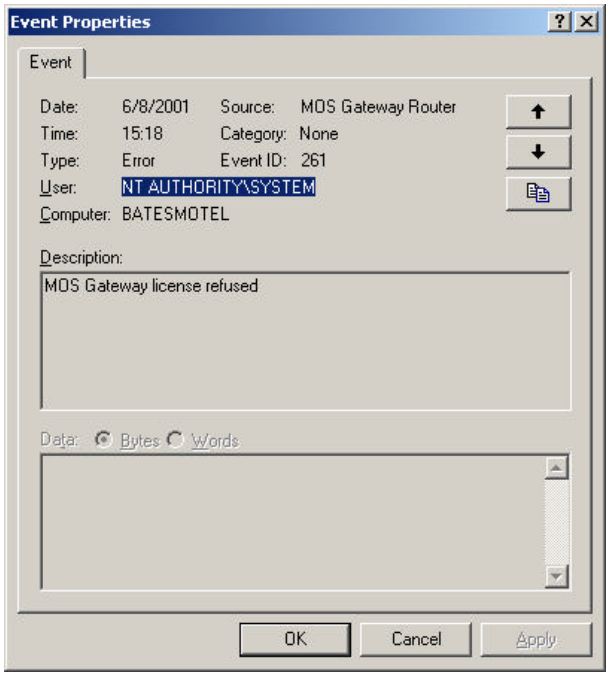


Figure 1 Event Properties Dialog Box for Windows 2000

The Description section provides status information, including error messages.

Error Categories

MOS Gateway errors can be divided into the following categories:

- Startup errors, which are reported when MOS Gateway cannot start
- Runtime configuration errors, which are reported when MOS Gateway encounters a situation where its configuration is incomplete
- Miscellaneous other errors

Error messages are listed in alphabetical order in Appendix A along with the category, source—the service generating the error—and actions required to alleviate any problems as noted by each error message.

n *Some resolutions require stopping and restarting any or all MOS Gateway services. For more information on how to do this, see "Stopping and Starting MOS Gateway" on page 79.*

After opening the Event Properties/Details dialog box and identifying the error and source, refer to Appendix A for more information.

Appendix A

Error Messages

This appendix contains MOS Gateway error messages in alphabetical order. Each message appears in a paragraph with the following format:

Error/Warning: Error message or warning text.

Location: Where message is found. **Source:** Which service.

Category: Which type of error.

Action: What to do about the problem.

n *Some error messages are warnings only; the MOS Gateway will continue to run with a default behavior. Warnings are indicated below with an additional opening Action statement "This is a warning only," and a description of the default behavior.*

See "Troubleshooting" on page99 for more information.

Error shows the error message itself, although some words are replaced with italicized words indicating their purpose. For instance, if an actual error message appears in the log file as "Could not find mapping from AMCP Device Name(SonyMOS) to MosID in config file," the corresponding error message below will be "Could not find mapping from AMCP Device Name(*devicename*) to MosID in config file."

Location specifies whether the error is found in the Event Log or in a log file. Source specifies which MOS Gateway component generated the error. Category specifies in which category the error falls. Categories are defined in the Chapter6, "Troubleshooting". Action describes steps to take to resolve the error.

Errors

Error: AMCP name *devicename* can be used for only one MOS device

Location: Log file **Source:** MOS Gateway Router

Category: Startup

Action: The MOS Gateway configuration file contains more than one `<mosDevice>/<names>` group with *devicename* as the AMCP name. Find all such groups in the configuration file and change the AMCP names so that they are all unique. Then, change the affected AMCP names in the `SYSTEM.MAP` and `SYSTEM.MOS-MAP` stories so that they match the newly chosen names. Stop and restart the Router.

Warning: AMCP roChannel(*iNEWSchannel*) could not be mapped to a MosDevChannel in `mosconfig.xml`

Location: Log file **Source:** MOS Gateway Router

Category: Runtime configuration

Action: This is a warning only. MOS Gateway received a channel specification for a MOS device that does not match any of the entries in the `<roChannels>` group of lines in that device's `<mosDevice>` group. Add an entry to the `<roChannels>` group that maps *iNEWSchannel* to a channel on the MOS device. Stop and restart the Router.

Error: Bad In MOS Lower port value.

Location: Event Log **Source**: MOS Gateway Router

Category: Startup

Action: Open the MOS Gateway configuration file. Edit the <in_lower> value in the <tcpPorts> group to insert a port number. Stop and restart the Router.

Error: Bad In MOS Upper port value.

Location: Event Log **Source**: MOS Gateway Router

Category: Startup

Action: Open the MOS Gateway configuration file. Edit the <in_upper> value in the <tcpPorts> group to insert a port number. Stop and restart the Router.

Error: Bad Out MOS Lower port value.

Location: Event Log **Source:** MOS Gateway Router

Category: Startup

Action: Open the MOS Gateway configuration file. Edit the <out_lower> value in the <tcpPorts> group to insert a port number. Stop and restart the Router.

Error: Bad Out MOS Upper port value.

Location: Event Log **Source:** MOS Gateway Router

Category: Startup

Action: Open the MOS Gateway configuration file. Edit the <out_upper> value in the <tcpPorts> group to insert a port number. Stop and restart the Router.

Error: Could not find mapping from AMCP Device Name(*devicename*) to MosID in config file.

Location: Log file **Source:** MOS Gateway Router

Category: Startup

Action: MOS Gateway received a command from the iNEWS Server targeting a MOS device with AMCP name *devicename*. MOS Gateway configuration files contains no `<mosDevice>` group with that AMCP name. Check the `SYSTEM.MAP` and `SYSTEM.MOS-MAP` stories to ensure that AMCP names there match the AMCP names in the MOS Gateway configuration file. Stop and restart the Router.

Error: ERROR, Could not get host name from IP address(*IP-address*)

Location: Log file **Source:** MOS Gateway Router

Category: Startup

Action: MOS Gateway cannot find the host name of a MOS device that connected to it. Ensure the MOS Gateway machine and the MOS device can find each other over the network. Check the domain name server and any local hosts files, or ask your network administrator for details.

Error: Error on incoming MOS message. See file: "*filename*"

Location: Log file **Source:** MOS Gateway Router

Category: Miscellaneous

Action: MOS Gateway received a MOS message containing errors from a MOS device. The log file will contain the name of a file that has been created in the MOS Gateway install directory, containing the text of the

erroneous message. You will need to contact the vendor of the MOS device for instructions on how to fix the problem. You can also send the error and log files to Avid Broadcast Customer Support for assistance.

Error: InternalItem.SetMosItem failed *value*

Location: Log file **Source:** MOS Gateway Router

Category: Miscellaneous

Action: MOS Gateway received a MOS item containing errors from the iNEWS Server. Delete the MOS item from its story and add a new MOS item. If this still does not work, contact the vendor of the ActiveX control for assistance.

Error: MOS Gateway license refused

Location: Event Log **Source:** MOS Gateway Router

Category: Startup

Action: Verify whether the License Server is running; if it is not running, restart it. If it is running, run the License Manager program—the executable file called `LicenseManager.exe` in the Install directory—and click the “Get Key” button to retrieve the license string. Compare the retrieved license string to the string that was included with the software to ensure that they are the same. If they are different, save the retrieved license string in a text file, insert the license string sent with the software, and click the “Set Key” button to set it.

Error: MOS Gateway Logger cannot start: Cannot create MOSConfiguration interface

Location: Event Log **Source:** MOS Gateway Logger

Category: Startup

Action: Ensure the MOS ConfigService is started.

Error: MOS Gateway Logger cannot start: Cannot create MOSConfiguration object.

Location: Event Log **Source:** MOS Gateway Logger

Category: Startup

Action: Ensure the MOS ConfigService is started.

Error: MOS Gateway Logger cannot start: Config file incomplete, the `<logging>` group must include `<directory>`, `<maxFileCount>`, and `<maxFileBytes>` elements."

Location: Event Log **Source:** MOS Gateway Logger

Category: Startup

Action: Open the MOS Gateway configuration file. Check that the `<logging>` group has three lines with tags: `<directory>`, `<maxFileCount>`, and `<maxFileBytes>`, each with a non-empty value. Add one or more if necessary. Stop and restart the Router.

Error: MOS Gateway Logger cannot start: Configuration file not found

Location: Event Log **Source:** MOS Gateway Logger

Action: Open the Registry Editor and navigate to the key `HKEY_LOCAL_MACHINE\SOFTWARE\Avid Technology\MOSGateway`.

There is a value called `ConfigFile` in the key. It contains a path to the MOS Gateway configuration file. If the path is wrong, change it to contain the correct path. If the path is correct, open the Windows Explorer and see if the MOS Gateway configuration file is in that directory. If not, create one.

Error: MOS Gateway Logger cannot start: failed to write test file - error is (The system cannot find the path specified.)

Location: Event Log **Source:** MOS Gateway Logger

Category: Startup

Action: Verify whether the logging directory specified in the MOS Gateway configuration file exists, and if the System user has write and delete access to the directory. If the directory does not exist, create it.

The procedure given for adjusting access permissions to a directory is for Windows XP operating systems. Steps may vary on a Windows 2000 operating system.

If the System user does not have the correct access to the directory, correct it using Windows Explorer. Right-click on the directory and select Properties from the pop-up menu. Then, select the Security tab of the Directory Properties dialog box and alter access permissions.

Error: MOS ID *device-id* can be used for only one MOS device

Location: Log file **Source:** MOS Gateway Router

Category: Startup

Action: The MOS Gateway configuration file contains more than one `<mosDevice>` group of lines that contains a `<names>` group with *device-id* as the MOS device name. Find all such groups in the configuration file and change the MOS device names so that they are all

unique. Then reset each renamed MOS device to match the name chosen. Refer to the MOS device's documentation for how to do this. Stop and restart the Router.

MOM stands for Media Object Metadata.

Error: MOS In Lower port (MOM) did not exist in config file.

Location: Event Log or Log file **Source:** MOS Gateway Router

Category: Startup

Action: Open the MOS Gateway configuration file. Edit the `<in_lower>` value in the `<tcpPorts>` group to insert a port number. If there is no `<in_lower>` line, put one in the file. Stop and restart the Router.

RO stands for Running Order

Error: MOS In Upper port(RO) did not exist in config file.

Location: Event Log or Log file **Source:** MOS Gateway Router

Category: Startup

Action: Open the MOS Gateway configuration file. Edit the `<in_upper>` value in the `<tcpPorts>` group to insert a port number. If there is no `<in_upper>` line, put one in the file. Stop and restart the Router.

Error: MOS Out Lower port (MOM) did not exist in config file.

Location: Event Log or Log file **Source:** MOS Gateway Router

Category: Startup

Action: Open the MOS Gateway configuration file. Edit the `<out_lower>` value in the `<tcpPorts>` group to insert a port number. If there is no `<out_lower>` line, put one in the file. Stop and restart the Router.

Error: MOS Out Upper port(RO) did not exist in config file.

Location: Event Log or Log file **Source:** MOS Gateway Router

Category: Startup

Action: Open the MOS Gateway configuration file. Edit the `<out_upper>` value in the `<tcpPorts>` group to insert a port number. If there is no `<out_upper>` line, put one in the file. Stop and restart the Router.

Warning: roChannel was not found in the RoInfo data(*roInfoData*)

Location: Log file **Source:** MOS Gateway Router

Category: Miscellaneous

Action: This is a warning only. There is a problem with the iNEWS Server software. Call Avid Broadcast customer support with the *roInfoData* for assistance.

Warning: roInfo data(*roInfoData*) could not be loading into an XMLDOM

Location: Log file **Source:** MOS Gateway Router

Category: Miscellaneous

Action: This is a warning only. There is a problem with the iNEWS Server software. Call Avid Broadcast customer support with the *roInfoData* for assistance.

Warning: The Device *devicename* was not found in the config file.

Location: Log file **Source:** MOS Gateway Router

Category: Startup

Action: This is a warning only. The MOS Gateway configuration file does not contain a `<mosDevice>` group for the MOS device *devicename*. Add a `<mosDevice>` group for the device. Stop and restart the Router.

Error: The MOS Gateway was unable to connect to *devicename*

Location: Log file **Source:** MOS Gateway Router

Category: Runtime configuration

Action: MOS Gateway cannot connect to the MOS device *devicename*. Ensure that MOS Gateway and the MOS device can find each other on the network, and that all appropriate applications are running on the MOS device.

Warning: The String *status-string* was not found in the config file under Device *devicename*.

Location: Log file **Source:** MOS Gateway Router

Category: Runtime configuration

Action: This is a warning only. MOS Gateway cannot find *status-string* in the `<statusTranslations>` group of the `<mosDevice>` group for *devicename*. It will set the status of the event to `UNKNOWN` in such a case. To avoid this, add *status-string* to the `<statusTranslations>` group by adding one of the `<statusXXX>` lines containing it.

Appendix A

Appendix B

System Reference Files

This appendix contains various samples of system files, such as the `/etc/hosts` file for the iNEWS Server.

- Sample Configuration File on MOS Gateway Servers
- Sample Configuration File on iNEWS Servers
- Sample /etc/hosts File on iNEWS Servers
- Sample System Stories in iNEWS
- MOSREPLICATION Form

Sample Configuration File on MOS Gateway Servers

This section provides the default configuration file installed on MOS Gateway Servers. Text enclosed by <! - - and - -> is a comment and will be ignored by the MOS Gateway.

n *Because of this book's margin requirements, some wrapping of text may occur in the following example that should not appear in the actual file.*

```
<?xml version="1.0" encoding="UTF-16" standalone="no"?>
<!-- MOS GATE WAY 2.0 Config file -->
<!-- This file contains configuration settings for the iNEWS MOS Gateway and is
meant to be used as a template. -->
<!-- It is in an XML-based format, with the root element being
mosGatewayConfiguration. -->
<mosGatewayConfiguration>
<!--The logging element specifies the directory in which to put log files,-->
<!--the maximum number of log files to create,& how big each one can grow.-->
    <logging>
        <directory>C:\Program Files\Avid\MOSGateway\Logs</directory>
        <maxFileCount>100</maxFileCount>
        <maxFileBytes>1000000</maxFileBytes>
<!-- YES/NO Also sends all logging to OutputDebugString so any Windows debugger
will see it. -->
        <winDebugTrace>yes</winDebugTrace>
        <!-- on/off Sends all incoming socket traffic to seperate log files. -->
        <socket>off</socket>
    </logging>
    <!-- -->
<!-- The tcpPorts element specifies the TCP ports on which the MOS Gateway
listens for -->
<!-- MOS connections. Every MOS that connects to the MOS Gateway must use the
same ports. -->
    <tcpPorts>
        <out_upper>10541</out_upper>
        <out_lower>10540</out_lower>
        <in_upper>10541</in_upper>
        <in_lower>10540</in_lower>
    </tcpPorts>
    <!-- -->
<!-- Newsroom system info -->
    <ncs>
        <!-- -->
<!--The ncsID used for replication, this must match the ncsID on MOS Device-->
<!--and the system ID of the iNEWS Server.  This setting is case sensitive. -->
        <ncsID>KIDDO</ncsID>
        <!-- -->
<!-- NCS's Host Name -->
<!-- Make sure this is resolves to the correct IP address of the iNEWS server-->
        <host>kiddo-a</host>
        <!-- -->
        <!-- Allow or Disallow Replication -->
        <!-- YES/NO -->
```

```
        <!-- default is YES -->
        <AllowReplication>YES</AllowReplication>
        <ReplicationUsername>mosrep</ReplicationUsername>
        <ReplicationPassword>mosrep</ReplicationPassword>
        <!-- -->
<!-- Allow or Disallow mosItemReplace -->
<!-- YES/NO -->
<!-- default is YES -->
        <AllowMosItemReplace>YES</AllowMosItemReplace>
    </ncs>
    <!-- -->
<!--The listDevices element contains device-specific configurations. It -->
<!--contains one or more mosDevice elements. The mosDevice element contains -->
<!--configuration-->
<!-- settings that are specific to a particular MOS. -->
    <listDevices>
        <mosDevice>
<!-- The names element contains the mapping of the MOS's mosID value to -->
<!-- an NRCS device name, as well as the network name of the MOS. -->
            <names>
                <mos>MOSGATE</mos>
                <amcp>qamosgw</amcp>
                <network>mosomni</network>
            </names>
            <!-- -->
<!--  Contains the mapping of the iNew's channel to   -->
<!--  a MOS devices channel.   -->
            <roChannels>
                <roChannel>
                    <iNewsChannel>cbs1</iNewsChannel>
                    <MosDevChannel>QACBS</MosDevChannel>
                </roChannel>
                <roChannel>
                    <iNewsChannel>cbs2</iNewsChannel>
                    <MosDevChannel>COLUMBUS</MosDevChannel>
                </roChannel>
                <roChannel>
                    <iNewsChannel>cbs3</iNewsChannel>
                    <MosDevChannel>Columbus3</MosDevChannel>
                </roChannel>
            </roChannels>
            <!-- -->
<!-- The handlesEmptyStories element specifies whether this device accepts -->
<!-- a roStoryInsert message that contains no item. -->
            <handlesEmptyStories>YES</handlesEmptyStories>
            <!-- -->
<!--The handlesRoStoryMoveMultiple element specifies whether this device -->
<!--supports the roStoryMoveMultiple message. The router defaults to YES. -->
<!--Valid settings are YES or NO -->
            <handlesRoStoryMoveMultiple>NO</handlesRoStoryMoveMultiple>
            <!-- -->
<!--The handlesRoItemLevelCommands element specifies whether this device -->
<!--supports roItemInsert, roItemDelete and roItemReplace.The router defaults-->
<!--to YES. Valid settings are YES or NO -->
            <handlesRoItemLevelCommands>NO</handlesRoItemLevelCommands>
            <!-- -->
            <sendRoCreateOnStartLoad>NO</sendRoCreateOnStartLoad>
<!--The statusTranslations element defines the status strings that correspond -->
```

```
<!--to the various NRCS status codes. This allows the MOS Gateway to translate-->
<!--the roItemStatus messages received from a MOS into status codes that NRCS -->
<!--can recognize and display. -->
          <statusTranslations>
             <statusUnknown/>
             <statusUnavailable>Bad Clip</statusUnavailable>
             <statusUnavailable>Unalloc.</statusUnavailable>
             <statusAvailable>UPDATED</statusAvailable>
             <statusCueing>Cueing</statusCueing>
             <statusCued>Ready</statusCued>
             <statusTensionReleased/>
             <statusPlayRequested/>
             <statusPlaying>ON AIR</statusPlaying>
             <statusPaused>PAUSED</statusPaused>
             <statusStopped/>
             <statusRewinding/>
          </statusTranslations>
          <mosObjReplication>
             <trigger>scheduled</trigger>
             <replicationTime>9:47:00 AM</replicationTime>
             <clearQueue>true</clearQueue>
             <path>mos.omnibus</path>
       <mosItemBrowserProgID>OmnibusODCLauncher.Launcher</mosItemBrowserProgID>
             <mosItemEditorProgID>OmniBusItemEdit.Edit</mosItemEditorProgID>
          </mosObjReplication>
       </mosDevice>
       <mosDevice>
<!-- The names element contains the mapping of the MOS's mosID value to -->
<!-- an NRCS device name, as well as the network name of the MOS. -->
          <names>
             <mos>PILOT</mos>
             <amcp>pilotem</amcp>
             <network>mbtest07</network>
          </names>
<!-- Maps a NRCS Running Order Name to a more readable MOS roSlug. -->
<!-- A NRCS Running Order Name is the NRCS server name plus the -->
<!-- running order's complete queue path.If a mapping doesn't exist-->
<!-- then the NRCS Running Order Name is used for the MOS roSlug. -->
          <!-- -->
<!--The handlesEmptyStories element specifies whether this device accepts -->
<!--a roStoryInsert message that contains no item. -->
          <handlesEmptyStories>YES</handlesEmptyStories>
          <!-- -->
<!--The handlesRoStoryMoveMultiple element specifies whether this device -->
<!--supports the roStoryMoveMultiple message. The router defaults to YES. -->
<!--Valid settings are YES or NO -->
          <handlesRoStoryMoveMultiple>YES</handlesRoStoryMoveMultiple>
          <!-- -->
<!--The handlesRoItemLevelCommands element specifies whether this device -->
<!--supports roItemInsert, roItemDelete and roItemReplace.The router defaults-->
<!--to YES. -->
          <!-- Valid settings are YES or NO -->
          <handlesRoItemLevelCommands>YES</handlesRoItemLevelCommands>
          <!-- -->
          <sendRoCreateOnStartLoad>NO</sendRoCreateOnStartLoad>
          <handlesSpecMosReqAll>NO</handlesSpecMosReqAll>
<!--The statusTranslations element defines the status strings that correspond -->
<!--to the various NRCS status codes. This allows the MOS Gateway to translate-->
```

```
<!--the roItemStatus messages received from a MOS into status codes that NRCS -->
<!--can recognize and display. -->
          <statusTranslations>
             <statusUnknown>UNKNOWN</statusUnknown>
             <statusUnavailable>BAD CLIP</statusUnavailable>
             <statusUnavailable>NOT READY</statusUnavailable>
             <statusUnavailable>UNKNOWN - ERROR INSERTING
ITEM</statusUnavailable>
             <statusAvailable>LOADED</statusAvailable>
             <statusAvailable/>
             <statusCueing>Cueing</statusCueing>
             <statusCued>Ready</statusCued>
             <statusTensionReleased />
             <statusPlayRequested />
             <statusPlaying>ON AIR</statusPlaying>
             <statusPaused>PAUSED</statusPaused>
             <statusStopped />
             <statusRewinding />
          </statusTranslations>
          <mosObjReplication>
             <trigger>scheduled</trigger>
             <replicationTime>5:00:00 PM</replicationTime>
             <clearQueue>true</clearQueue>
             <path>mos.viz</path>
       <mosItemEditorProgID>VCPAxFiller.VCPTemplateFiller</mosItemEditorProgID>
          </mosObjReplication>
       </mosDevice>
       <mosDevice>
<!-- The names element contains the mapping of MOS's mosID value to-->
<!-- an NRCS device name, as well as the network name of the MOS. -->
          <names>
             <mos>SONY</mos>
             <amcp>sonyem</amcp>
             <network>brownout</network>
          </names>
<!-- Maps a NRCS Running Order Name to a more readable MOS roSlug. -->
<!-- A NRCS Running Order Name is the NRCS server name plus the -->
<!--running order's complete queue path.If a mapping doesn't exist-->
<!-- then the NRCS Running Order Name is used for the MOS roSlug. -->
          <roSlugMaps>
             <roSlugMap>
    <iNewsRunningOrderName>KIDDO/SHOW.SONYMOS.RUNDOWN</iNewsRunningOrderName>
                <MOSroSlug>SONYMOS</MOSroSlug>
             </roSlugMap>
             <roSlugMap>
    <iNewsRunningOrderName>KIDDO/SHOW.SONYMOS2.RUNDOWN</iNewsRunningOrderName>
                <MOSroSlug>SONYMOS2</MOSroSlug>
             </roSlugMap>
             <roSlugMap>
    <iNewsRunningOrderName>KIDDO/SHOW.SONYMOS3.RUNDOWN</iNewsRunningOrderName>
                <MOSroSlug>SONYMOS3</MOSroSlug>
             </roSlugMap>
          </roSlugMaps>
          <!-- -->
<!-- The handlesEmptyStories element specifies whether this device accepts -->
<!-- a roStoryInsert message that contains no item. -->
          <handlesEmptyStories>NO</handlesEmptyStories>
          <!-- -->
```

```
<!--The handlesRoStoryMoveMultiple element specifies whether this device -->
<!--supports the roStoryMoveMultiple message. The router defaults to YES. -->
<!--Valid settings are YES or NO -->
          <handlesRoStoryMoveMultiple>NO</handlesRoStoryMoveMultiple>
          <!-- -->
<!--The handlesRoItemLevelCommands element specifies whether this device -->
<!--supports roItemInsert, roItemDelete and roItemReplace.The router defaults-->
<!--to YES. Valid settings are YES or NO -->
          <handlesRoItemLevelCommands>NO</handlesRoItemLevelCommands>
          <!-- -->
          <sendRoCreateOnStartLoad>NO</sendRoCreateOnStartLoad>
<!-- If YES then the stories page number from NRCS is prepended to the story -->
<!-- slug. -->
          <prependPageNumber>YES</prependPageNumber>
          <!-- -->
<!--The character seperator used between the page number and the story slug.-->
          <prependSeparator>-</prependSeparator>
          <!-- -->
<!--The character string which is used in place of an empty page number.-->
       <prependStringForEmptyPageNumber>XXX</prependStringForEmptyPageNumber>
          <!-- -->
          <handlesSpecMosReqAll>NO</handlesSpecMosReqAll>
<!--The statusTranslations element defines the status strings that correspond -->
<!--to the various NRCS status codes. This allows the MOS Gateway to translate-->
<!--the roItemStatus messages received from a MOS into status codes that NRCS -->
          <!-- can recognize and display. -->
          <statusTranslations>
             <statusUnknown>UNKNOWN</statusUnknown>
             <statusUnavailable>NOT READY</statusUnavailable>
             <statusUnavailable>DELETED</statusUnavailable>
             <statusUnavailable>ERROR</statusUnavailable>
             <statusAvailable>READY</statusAvailable>
             <statusCueing/>
             <statusCued>CUED</statusCued>
             <statusCued>STAND BY</statusCued>
             <statusTensionReleased/>
             <statusPlayRequested/>
             <statusPlaying>PLAY</statusPlaying>
             <statusPaused>PAUSED</statusPaused>
             <statusStopped>STOP</statusStopped>
             <statusStopped>END</statusStopped>
             <statusRewinding/>
          </statusTranslations>
          <mosObjReplication>
             <trigger>scheduled</trigger>
             <replicationTime>1:46:00 PM</replicationTime>
             <clearQueue>true</clearQueue>
             <path>mos.sony</path>
          </mosObjReplication>
       </mosDevice>
       <mosDevice>
<!-- The names element contains mapping of MOS's mosID value to -->
<!-- an NRCS device name, as well as the network name of the MOS. -->
          <names>
             <mos>NewsQPro</mos>
             <amcp>NQProem</amcp>
             <network>mosman</network>
          </names>
```

```
            <!-- -->
            <roSlugMaps>
               <roSlugMap>
    <iNewsRunningOrderName>KIDDO/SHOW.NEWSQPRO.RUNDOWN</iNewsRunningOrderName>
                  <MOSroSlug>NEWSQPRO</MOSroSlug>
               </roSlugMap>
               <roSlugMap>
    <iNewsRunningOrderName>KIDDO/SHOW.NEWSQPRO2.RUNDOWN</iNewsRunningOrderName>
                  <MOSroSlug>NEWSQPRO2</MOSroSlug>
               </roSlugMap>
               <roSlugMap>
    <iNewsRunningOrderName>KIDDO/SHOW.NEWSQPRO3.RUNDOWN</iNewsRunningOrderName>
                  <MOSroSlug>NEWSQPRO3</MOSroSlug>
               </roSlugMap>
            </roSlugMaps>
            <!-- -->
<!-- The handlesEmptyStories element specifies whether this device accepts -->
<!-- a roStoryInsert message that contains no item. -->
            <handlesEmptyStories>NO</handlesEmptyStories>
            <!-- -->
<!--The handlesRoStoryMoveMultiple element specifies whether this device -->
<!--supports the roStoryMoveMultiple message. The router defaults to YES. -->
<!--Valid settings are YES or NO -->
            <handlesRoStoryMoveMultiple>NO</handlesRoStoryMoveMultiple>
            <!-- -->
<!--The handlesRoItemLevelCommands element specifies whether this device -->
<!--supports roItemInsert, roItemDelete and roItemReplace.The router defaults-->
<!--to YES. Valid settings are YES or NO -->
            <handlesRoItemLevelCommands>NO</handlesRoItemLevelCommands>
            <!-- -->
<!-- If YES then the stories page number from NRCS is prepended to the story -->
<!-- slug. -->
            <prependPageNumber>YES</prependPageNumber>
            <!-- -->
<!-- The character seperator used between the page number and the story slug.-->
            <prependSeparator>-</prependSeparator>
            <!-- -->
<!--The character string which is used in place of an empty page number.-->
    <prependStringForEmptyPageNumber>NO PAGE</prependStringForEmptyPageNumber>
            <!-- -->
            <sendRoCreateOnStartLoad>YES</sendRoCreateOnStartLoad>
            <handlesSpecMosReqAll>YES</handlesSpecMosReqAll>
<!--The statusTranslations element defines the status strings that correspond-->
<!--to the various NRCS status codes. This allows the MOS Gateway to translate-->
<!--the roItemStatus messages received from a MOS into status codes that NRCS-->
<!--can recognize and display. -->
            <statusTranslations>
               <statusUnknown/>
               <statusUnavailable>NOT READY</statusUnavailable>
               <statusUnavailable>POST ROLL</statusUnavailable>
               <statusUnavailable>Unalloc.</statusUnavailable>
               <statusAvailable>READY</statusAvailable>
               <statusCueing>CUEING</statusCueing>
               <statusCued>CUED</statusCued>
               <statusTensionReleased/>
               <statusPlayRequested/>
               <statusPlaying>PLAY</statusPlaying>
               <statusPaused>STOPPED</statusPaused>
```

```
            <statusStopped>PLAYED</statusStopped>
            <statusRewinding/>
         </statusTranslations>
         <mosObjReplication>
            <trigger>scheduled</trigger>
            <replicationTime>10:36:00 AM</replicationTime>
            <clearQueue>true</clearQueue>
            <path>mos.nqp</path>
            <mosItemBrowserProgID>GVG.XMOSCtrl.1</mosItemBrowserProgID>
         </mosObjReplication>
      </mosDevice>
   </listDevices>
</mosGatewayConfiguration>
```

Sample Configuration File on iNEWS Servers

After you choose a mailbox and a device number for your monitor server, you must add certain information to your system configuration file—`/site/config` on the iNEWS Servers. The procedures for this are found in Chapter 4. However, Figure 1 shows a sample configuration file with pointers indicating where in the file information is entered. In this example, the monitor server being added is assigned 204 as its device number and mailbox number.

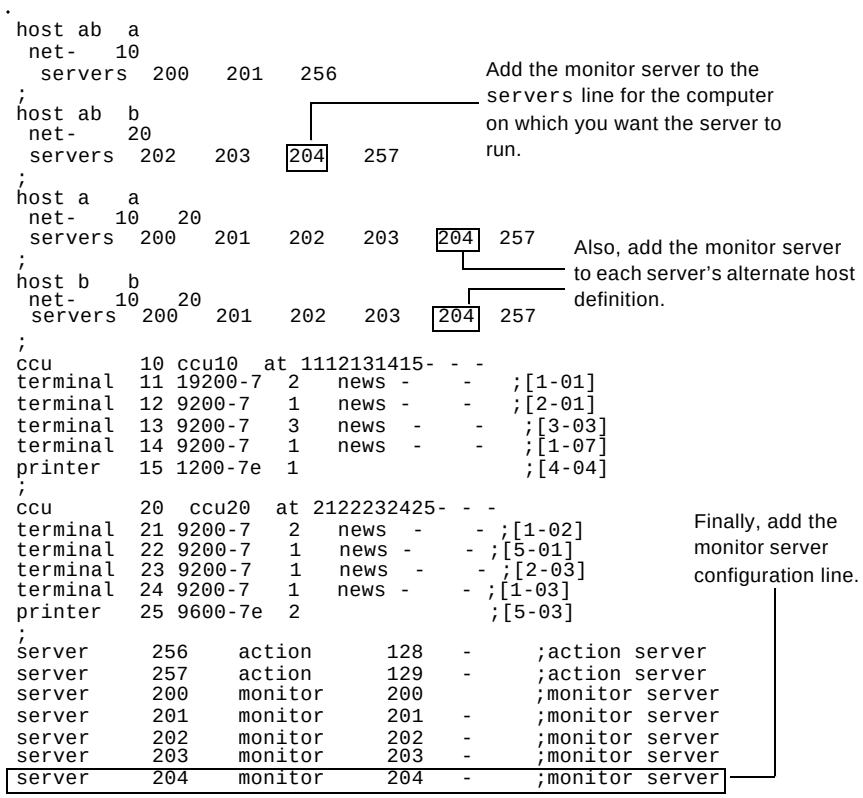

host ab a
net- 10
servers 200 201 256
;
host ab b
net- 20
servers 202 203 204 257
;
host a a
net- 10 20
servers 200 201 202 203 204 257
;
host b b
net- 10 20
servers 200 201 202 203 204 257
;
ccu 10 ccu10 at 1112131415- - -
terminal 11 19200-7 2 news - - ;[1-01]
terminal 12 9200-7 1 news - - ;[2-01]
terminal 13 9200-7 3 news - - ;[3-03]
terminal 14 9200-7 1 news - - ;[1-07]
printer 15 1200-7e 1 ;[4-04]
;
ccu 20 ccu20 at 2122232425- - -
terminal 21 9200-7 2 news - - ;[1-02]
terminal 22 9200-7 1 news - - ;[5-01]
terminal 23 9200-7 1 news - - ;[2-03]
terminal 24 9200-7 1 news - - ;[1-03]
printer 25 9600-7e 2 ;[5-03]
;
server 256 action 128 - ;action server
server 257 action 129 - ;action server
server 200 monitor 200 ;monitor server
server 201 monitor 201 - ;monitor server
server 202 monitor 202 - ;monitor server
server 203 monitor 203 - ;monitor server
server 204 monitor 204 - ;monitor server
Add the monitor server to the servers line for the computer on which you want the server to run.
Also, add the monitor server to each server's alternate host definition.
Finally, add the monitor server configuration line.

Figure 1 Adding a Monitor Server to iNEWS Configuration File

Sample /etc/hosts File on iNEWS Servers

```
#  IP address-hostname database
#MIRROR NETWORK
10.1.0.1      NRCS-A nrcs-a A a nrcs-a.local NRCS-A.local
10.1.0.2      NRCS-B nrcs-b B b nrcs-b.local NRCS-B.local
10.1.0.8      WEBARCHIVE webarchive
10.1.0.10     PCU10  pcu10
10.1.0.20     PCU20  pcu20
10.1.0.30     pcu30  PCU30
10.1.0.19     MCSPC1 mcspc1 MCSPC19 MCSPC19
10.1.0.29     MCSPC2 mcspc2 MCSPC29 mcspc29

#CLIENT NETWORK
172.101.6.2  NRCS-A1 nrcs-a1 A1 a1  #iNEWS Workstation
172.101.6.3  NRCS-B1 nrcs-b1 B1 b1  #iNEWS Workstation
172.101.6.4  ftsserver FTSSERVER
172.101.6.5  casvr1 CASVR1          #CA Server Studio A
172.101.6.6  casvr2 CASVR2          #CA Server Studio B
172.101.6.8  CAWS-a CAWS-A          #CA Workstation
172.101.6.9  CAWS-b CAWS-B          #CA Workstation
172.101.6.10 CAWS-video CAWS-VIDEO
172.101.6.11 inews-web INEWS-WEB
172.101.6.12 MOSGWY mosgwy          # MOS Gateway machine
172.101.6.13 MG1    mg1             # MOS Gateway Server 1
172.101.6.14 MG2    mg2             # MOS Gateway Server 2
```

Sample System Stories in iNEWS

There are two stories in the iNEWS System directory that contain MOS-related information. They are:

- The map story, which is the first entry in the SYSTEM.MAP queue. An example of this story is provided in Chapter4. See Figure2on page56 for more information.

- The SYSTEM.MOS-MAP story, an example of which is provided below:

```
ReplaceTime=YES
TABLE-START DeviceTable
;MOSID AMCPDeviceName
sony sonyem
MOSGATE qamosgw chan1 chan2 chan3
PILOT pilot
AIRSPACE airem
VERTIGO vertigo
NewsQPro NQPro <noDur>
NETIAMOS netia
TABLE-END
```

  Procedures for editing the SYSTEM.MOS-MAP story are in Chapter4. See “Edit the SYSTEM.MOS-MAP Story” on page51.

MOSREPLICATION Form

The MOSREPLICATION form is a queue in the iNEWS System directory that is provided as part of the starter database at new sites. Its pathname is usually SYSTEM.FORMS.M.MOSREPLICATION. It is the form assigned as both the Queue and Story Form for device-specific queues in the iNEWS database. It contains three stories that define the format by which MOS items are replicated.

n *The procedure for assigning the MOSREPLICATION form to device-specific queues is provided in Chapter4 on page 72.*

For existing iNEWS sites, the system administrator can create this form by adhering to the following guidelines.

- Create a queue in the SYSTEM.FORMS.M directory and name it MOSREPLICATION.
- Ensure the MOSREPLICATION queue uses the same fields as the form used for show rundowns. Information about MOS-related fields is provided in Chapter 4 of this manual; See Table1 on page 49.

For information on using the `dbrestore` command, see the *iNEWS Newsroom Computer System Operations Manual.*

- Use the `dbrestore` command at the iNEWS console to transfer three stories provided in the Replication folder on the MOS Gateway Install CD to the `MOSREPLICATION` queue. The stories are in a file called `mosreplication.dbdump`. Samples of all three are provided in Figure2, Figure3, and Figure4in this Appendix.

For more information, see the `ReadMe.txt` file also provided in the Replication folder on the CD.

- All three stories share the same title (or slug): `%/mos/mosObj/objSlug/text()%`

  But the text of each story varies—each one corresponding to one of three replicating configuration options:

  - Replicate MOS items to the story form
  - Replicate MOS items to the body of the story
  - Replicate MOS items to the story form and body.

  Only the first story in the queue determines the format used for replicating MOS items; the remaining two are ignored by the system. So, ensure the story corresponding to your chosen format is first in the queue.

The text of all three stories are provided in the following figures:

```
*%inews.amcpname% ]] 1 %inews.mos-active
% [[ %/mos/mosObj/objSlug/text()%
```

```
This story contains a single MOS item in its body
area, corresponding to metadata for a MOS object
received from a MOS device.

¤

mosID: %/mos/mosID/text()%
ncsID: %/mos/ncsID/text()%
objID: %/mos/mosObj/objID/text()%
objSlug: %/mos/mosObj/objSlug/text()%
objType: %/mos/mosObj/objType/text()%
objTB: %/mos/mosObj/objTB/text()%
objRev: %/mos/mosObj/objRev/text()%
objDur: %/mos/mosObj/objDur/text()%
status: %/mos/mosObj/status/text()%
objAir: %/mos/mosObj/objAir/text()%
createdBy: %/mos/mosObj/createdBy/text()%
created: %/mos/mosObj/created/text()%
changedBy: %/mos/mosObj/changedBy/text()%
changed: %/mos/mosObj/changed/text()%
```

Figure 2 Story for MOS Replication to the Story Body

This story contains a single MOS item in its form area, corresponding to metadata for a MOS object received from a MOS device.

mosID: %/mos/mosID/text()%
ncsID: %/mos/ncsID/text()%
objID: %/mos/mosObj/objID/text()%
objSlug: %/mos/mosObj/objSlug/text()%
objType: %/mos/mosObj/objType/text()%
objTB: %/mos/mosObj/objTB/text()%
objRev: %/mos/mosObj/objRev/text()%
objDur: %/mos/mosObj/objDur/text()%
status: %/mos/mosObj/status/text()%
objAir: %/mos/mosObj/objAir/text()%
createdBy: %/mos/mosObj/createdBy/text()%
created: %/mos/mosObj/created/text()%
changedBy: %/mos/mosObj/changedBy/text()%
changed: %/mos/mosObj/changed/text()%

Figure 3 Story for MOS Replication to the Story Form

*%inews.amcpname%]] 1 %inews.mos-active % [[%/mos/mosObj/objSlug/text()%

This story contains two MOS items, one in its form area, one in its body area. Both are identical and correspond to metadata for a MOS object received from a MOS device.

¤

mosID: %/mos/mosID/text()%
ncsID: %/mos/ncsID/text()%
objID: %/mos/mosObj/objID/text()%
objSlug: %/mos/mosObj/objSlug/text()%
objType: %/mos/mosObj/objType/text()%
objTB: %/mos/mosObj/objTB/text()%
objRev: %/mos/mosObj/objRev/text()%
objDur: %/mos/mosObj/objDur/text()%
status: %/mos/mosObj/status/text()%
objAir: %/mos/mosObj/objAir/text()%
createdBy: %/mos/mosObj/createdBy/text()%
created: %/mos/mosObj/created/text()%
changedBy: %/mos/mosObj/changedBy/text()%
changed: %/mos/mosObj/changed/text()%

Figure 4 Story for MOS Replication to the Story Form and Body

Appendix B

Glossary

10Base-T Low-cost point-to-point 10Mb / sec Ethernet using four unshielded twisted pairs (UTP) of wire (only two pairs are actually used) with RJ-45 connectors.

100Base-T Low-cost point-to-point 100Mb / sec Ethernet using four UTP (only two pairs are actually used) with RJ-45 connectors.

absolute time The time assigned to a clip when it was encoded.

account A level of authorization assigned to individuals using iNEWS newsroom computer system. This determines the types of information users can access and the actions they can perform. Account types include user, user manager, superuser, and system administrator.

ActiveX A Microsoft control that may be embedded in a Web page to make it look more exciting or perform more complex functions. See also *plugin* and *MOS item*.

alias A code of up to 12 alphanumeric characters. It substitutes individual user names and automates the distribution of a mail story to a group of people.

anchor 1. The person presenting a newscast on-air to a television audience. Also called a *presenter*.
2. The indicator in a Story Text panel that links a script to production information, such as machine control events. Also called: *grommet* or *production cue marker.*

ASCII American Standard Code for Information Interchange. The standard that governs the recording of characters by a sequence of binary digits, as in a computerized timecode or video editing system.

auto-backup A function in iNEWS newsroom computer system that writes a backup copy of an open story to a user's local disk at specified time intervals.

auto-refresh A queue attribute that automatically redisplays the queue screen whenever changes are made to the queue.

autoscript A mode in which the production cue area of a story is automatically displayed if production cues are in the story. If there are no production cues added to a story, the story is displayed unscripted.

backtime The exact time when a story in a newscast must start in order for the show to remain on schedule. Television newscasts typically use backtime to ensure that the newscast ends precisely as scheduled.

baud Unit for measuring the rate of the digital data transmission. Usually one baud equals one bit per second.

bulletin An incoming wire story coded as high-priority by a wire service; it is fed directly into the iNEWS "priority" queue. Users are informed of its arrival with both an audio signal and lightning bolt icon in the status portion of the iNEWS Workspace.

CAP event A machine control event created by an ActiveX plugin to be sent to ControlAir. Also known as a ControlAir plugin event. See also *plugin event*, *MOS item*, and *machine control event*.

clip A segment of digitized source material.

connect To call a service that is either local (such as an archive system) or remote (such as Nexis). In iNEWS, users connect to services to access data.

context menu See *pop-up menu*.

ControlAir A product, formerly known as Broadcast Control System or BCS, that works with the iNEWS newsroom computer system to run a show's pro-

duction devices, such as character generators, still-stores, and videotape devices.

cue — See *production cue*.

cume (cumulative) time — The amount of airtime required from the beginning of the show up to a certain point in the show in order for the show to remain on-schedule. It is displayed with each entry in a rundown queue. Cumetime is used by producers when building, ordering, or airing a newscast.

DAT — A digital audio recording format that uses 3.8mm-wide magnetic tape in a plastic cassette. (Digital Audio Tape)

Dead queue — A queue containing stories that have been either deleted by users or purged automatically by the system. These stories are recycled automatically as new space is required.

device — Any computer peripheral of hardware component (such as printer, mouse, monitor, or hard disk) capable of receiving or sending data.

dialog box — A secondary window that gathers additional information from a user. It usually contains only a close (X) button in the top right corner, and can be removed from the screen by pressing the Escape (ESC) key. See also *window*.

directory — Like a file drawer in a file cabinet, a directory is a storage space. Directories, also known as *folders*, can contain other directories (known as subdirectories) or queues. Directories do not contain stories.

Directory panel — An area in the iNEWS Workspace that displays the hierarchy of directories (folders) and queues in the iNEWS database. Users can use the Directory panel to navigate through the system.

drop-down menu — A menu that is displayed from a menu bar—the bar of words, such as File or Edit, located at the top of a window. The menu can appear as a result of a mouse click on the menu bar or a keystroke combination of ALT plus the underlined letter of a word in the menu bar. For instance, ALT-F will open the File drop-down menu. See also *pop-up menu*.

duration The length of a show or story. It is calculated by using the elapsed time in a broadcast when a story begins.

easy lock A feature that allows a user to open a queue or story while preventing others from doing the same. It is similar to a key lock, but is created without a key. Therefore, others cannot be granted access. See also *lock, key lock*.

Edit Decision List (EDL) A list of edits made during offline editing and used to direct the online editing of the master.

edit lock A feature that prevents two people from working in a story simultaneously. The iNEWS system automatically places a story in edit-lock mode when a user is working in a story, and a user can also manually edit lock a story.

encode The process of converting analog video to a digital form.

Ethernet A standard for connecting computers in a local area network (LAN). The actual technicalities are based on a Collision Sense Multiple Access protocol (CSMA).

export 1. To create an EDL from a sequence.
2. To conform a sequence.

extract To remove a selected area from an edited sequence and close the resulting gap in the sequence.

float To temporarily suspend a story. The story's time is removed from the show timing. Float time is also ignored by the teleprompter and machine control. Floating is used when you are not sure whether or where to put a story in a rundown.

folder See *directory*.

form A preformatted layout (template) containing the fields and the field positions (such as presenter and writer) required for a story. The form serves as a copy master when creating a new story.

gigabyte (GB) Approximately one billion bytes (1,073,741,824 bytes) of information.

grommet The indicator in a Story Text panel that links a script to production information. Also called: *anchor* or *marker*.

hard out A story in a newscast that has a fixed start time, usually at the end of a segment or show. It is manually entered into the system.

headframe A single frame that can be used to help visually identify a clip or a sequence.

high-resolution Digital video of a resolution suitable for broadcast.

In point Starting point of an edit. Also known as a *Mark IN*.

insert The process of including a clip into a sequence.

Instruction panel The area of the Story panel that contains production cues or machine control data. This area can be removed (hidden) from the display within the Story panel, so it may not appear on screen. See also *Story panel, Story Form panel, Story Text panel*.

IP address An Internet Protocol address is a 32-bit numeric identifier usually expressed as four groups of 8-bit decimal numbers (0 to 256) separated by dots, as in 192.168.0.1.

ISA Industry Standard Architecture. A bus standard used in personal computers.

key A special alphanumeric code that a user assigns to a queue or story to lock it. To open, or unlock, a queue or story, a user must have the key. See also *lock, easy lock, key lock*.

key lock A feature that allows a user to lock a queue. To open the key-locked queue, all users (including the individual who put the key lock on the queue) must know the ”key” if they want to open, move, duplicate, print, or delete the queue. See also *lock, easy lock*.

kill To delete a story and place it in the Dead queue.

lineup — See *rundown*.

load — The process of opening a clip into the editor in preparation for viewing or editing.

Local Area Network (LAN) — This is a network of computers located in a common environment, such as in a building or building complex.

lock — To protect a queue or story from access by unauthorized users. A queue or story can be locked and unlocked with a key or by a user-name specific lock. See also *key*, *easy lock*, *key lock*.

low-resolution — Digital video of a resolution suitable for edits.

machine control event — A production cue that drives a playout device. The event typically appears in Production Cue text boxes in the Instruction panel of iNEWS, and includes commands for machines, such as still stores, character generators, digital playback devices, cart machines, and so forth. Each one begins with an asterisk, followed by a code for the type of machine the instruction is for, such as CG for character generator or SS for still store machine, and so forth. Then, information specific to the machine and particular item or template is provided. Also known as machine control commands or machine control instructions. See also *MOS item*.

marker

1. The indicator in a Story Text panel that links a script to production information. Also called: *grommet* or *anchor*.
2. A mark added to a selected frame to qualify a particular location within a video sequence.

Media Browse — A system that works with iNEWS and high-resolution editing applications to create broadcast-quality video output.

media object — An on-air object managed by a MOS device. See also *MOS*.

menu — See *drop-down menu*, *pop-up menu*.

Messages of the Day window — A window that displays one or more messages for iNEWS system users when they log in to the system.

mirroring A fault tolerance method that keeps identical copies of data on disk partitions located on different physical hard disks and servers.

MOM Acronym for Media Object Metadata.

MOS Acronym for Media Object Server. See also *MOS device*.

MOS device A vendor product that stores media objects and supports the MOS protocol.

MOS item A machine control event created from an ActiveX plugin to be sent to a MOS device. See also *plugin event* and *production cues*.

MOS protocol XML-based protocol for communication between a newsroom computer system and a MOS device. For more information, visit `http://www.mosprotocol.com` on the Internet.

MOS replication A feature that enables integration between iNEWS and third-party vendors of MOS devices that do not have ActiveX controls. Replication provides iNEWS users with search capability of a MOS device's inventory, using tools within the newsroom computer system.

multimedia In computing, multimedia refers to the presentation of information on a computer using sound, graphics, animation, and text.

network A group of computers and other devices connected together so they can communicate with each other.

network address A network number that uniquely identifies a network cable segment. It is also referred to as the IPX external network number.

NRCS An acronym for Newsroom Computer System.

order lock A temporary lock that the iNEWS system places on a queue when a user changes a sequence of stories in that queue. Order locking does not prevent other users from accessing the queue, but does prevent them from ordering the queues simultaneously.

Out point — End point of an edit, or a mark on a clip indicating a transition point. Also known as a *Mark OUT*.

out time — The total length of time for a show (shown in hours, minutes, and seconds) or the actual time by which the show must end (shown in 12-hour-clock time). See also *backtime*.

panel — A part of an iNEWS Workspace. In iNEWS, the three panels are the Directory panel, Queue panel, and Story panel. The Story panel is split further into the Story Form panel, Story Text panel, and Instruction panel (used for production cues).

partition — A method of assigning disk space, creating two or more virtual disks from a single physical disk. Similar to creating a directory.

password — A word users enter when logging in to the iNEWS system. Passwords are alphanumeric and must be between 5- and 12-characters long.

pathname — The hierarchical name of the directory and queue in which a story is located. For instance, the pathname for the Yankees queue is `WIRES.SPORTS.STORIES.YANKEES`.

PCI — Peripheral Component Interconnect. A bus standard used in newer computers.

player controls — The electronic equivalent of a tape-deck controls.

plugin — A small software program that helps a Web browser interpret certain types of media files. See also *MOS item.*

plugin event — A machine control event created by an ActiveX plugin. A plugin event is always read-only and cannot be manually changed. A plugin event to be sent to a MOS device is known as a MOS item. See also *MOS item*, *CAP event*, and *machine control event*.

pop-up menu — A menu that appears at the mouse pointer location when a user executes a right-click on a selected object. It contains commands contextually relevant to the selection. Also known as context menu. See also *drop-down menu*.

presenter The person presenting a newscast on-air to a television audience. Also called an *anchor*.

preview To rehearse an sequence without actually performing (exporting) it.

priority queue

1. An area where iNEWS places copies of wire stories (usually in `WIRES.ADVISORY.PRIORITY`).
2. A queue designated to be read first by a server program for new stories.

production cue A prompt to start a story element, such as a video playback. In iNEWS, it is typically anchored to the script by a marker with text appearing to the left of a scripted story, and it provides information for production staff, such as VO—an indication to the presenter that video is on-air. Production cues may also contain instructions for machine control events that involve other devices being controlled in the rundown. These machine control instructions are usually prefaced by an asterisk (*). See also *marker* and *machine control event*.

purge To remove stories from queues (based on age) and place them in the Dead queue. Purged stories are recycled as needed as new space is required. See also *purge interval*.

purge interval A queue trait that indicates the time after which a story is considered "old." At hourly intervals, iNEWS will scan the entire database and purge old stories from a queue.

queue An area of the database that contains stories related to a general topic. Like a folder in a file drawer, queues are storage places within a system's file structure that allow you to organize information in detailed categories. See also *directory*, *Directory panel*, *Queue panel.*

queue form The area used to display the contents, size, and labels of a Queue panel.

Queue panel An area in the iNEWS Workspace that contains a list of the stories in a queue. Users can add, delete, and sequence stories in the Queue panel.

queue property — A trait that controls the characteristics of a queue in the iNEWS database. Queue properties include the refresh trait, read-only purge interval, sorting, and so forth.

read access — Authority granted to users that allows them to read and duplicate the contents of a directory, queue, or story.

read rate — The number of words per minute at which a talent can read a news story. The system determines the total running time of a newscast based on the read rate of the assigned presenter.

refresh — A queue property or trait that automatically updates your screen's display of the queue when changes are made to that queue by another user or by the system.

relative-to-mark time — Time is displayed as though the start of the clip is at the locator mark.

relative-to-start time — Time is displayed as though the start of the clip is at `00;00;00;00`.

remote service — An archival system, bulletin board, or any information service that allows you to establish a connection to another service.

replication — See *MOS replication*.

results queue — An area in iNEWS in which results from a Find All search are placed.

roll — To play a video. The digital equivalent of starting the tape deck.

RS-232 — The Electronic Industries Association standard for short-range serial control.

RS-422 — The Electronic Industries Association standard for medium-range serial control.

rundown — A lineup or timed-out list of stories indicating the order in which they will be aired during a news program. A rundown is viewed in the Queue panel

of the iNEWS Workspace. The rundown queue typically uses a form with BACK-TIME or CUME-TIME fields to display the timing of the newscast.

SCO — Santa Cruz Operation UNIX® operating system.

scratch pad — A buffer in which text or notes are stored until the appropriate recovery procedures is performed. Deleted text and notes are stored in the scratch pad. It is separate from the Windows Clipboard and allows clippings to be accumulated.

script — A story that is read on the air. Typically, a script also contains production cues and references to the related media annotations.

SCSI — Small Computer System Interface is an industry standard with guidelines for connecting peripheral devices (such as hard drives and tape backup systems) and their controllers to a microprocessor. The SCSI, commonly pronounced “scuzzy,” interface defines standards for hardware and software to communicate between a host computer and a peripheral device. Computers and peripheral devices designed to meet SCSI Specifications are normally compatible.

selection bar — The box at the left edge of a Queue panel that, when clicked, selects a story and all of that story’s details.

sequence — An edited composition that includes one or more clips.

server

1. A special utility program the system uses to handle the distribution of stories internally. Some of these servers are known as: action, distribution, parallel, and so forth.
2. Computer hardware (or file servers) with the iNEWS database and running the iNEWS application software. These computers also run other operating systems, such as UNIX or Windows NT®. For instance, the FTS server and the iNEWS Servers (also called server A, server B, or `NRCS-A`, `NRCS-B`, and so forth).

session — The way in which an iNEWS Workspace is customized. Toolbars, workspace layout, and preferences can be customized and saved with a session.

slave printer A printer attached to the workstation.

sorted queue A queue in which stories are sorted according to criteria specified by the system administrator.

source queue A queue from which stories are copied or moved.

story Uniquely identified file containing text; stories are grouped in queues and are displayed in the Story panel of the iNEWS Workspace.

Story Form panel An area at the top of a Story panel that contains information about a story, such as its title, length, or status. This information is provided in fields that may correspond to data displayed in the Queue panel. This area can be removed (hidden) from the display within the Story panel, so it may not appear on screen.

Story panel An area in the iNEWS Workspace that displays the story form, text, and production cues of a story.

Story Text panel An area in the Story panel that contains the text or script of a story. It is the only area that is always displayed as part of the Story panel. See also *Story panel, Story Form panel, Instruction panel.*

superuser A user account that is given access to restricted functions in the iNEWS system. Only a system administrator can assign superuser status.

system administrator A person responsible for maintaining the iNEWS system and keeping all functions operating properly.

TCP/IP Transmission Control Protocol/Internet Protocol is a platform-independent protocol for intercomputer communication.

time bar A graphical representation of the duration of a clip, including an indication of the current position and the In and Out marks.

user Individual who has a valid user account in the iNEWS system.

user ID — A special alphanumeric code that identifies a user account in the iNEWS system. A user ID can be up to 20-characters long.

user manager — User ID given the authority to add, modify, delete, and search for information about user accounts. User manager status can be assigned by a system administrator only.

user name — A word established to identify the individual user. Enter your user name and your password to log in. User names are alphanumeric and are up to 20-characters long.

video clip — See *clip*.

window — An area in which the main interaction takes place. It is typically rectangular, with a title bar (that appears blue when active and gray when inactive), and three buttons in the top right corner (used to resize the window or close it). Unlike a dialog box, a standard window cannot be closed by pressing the Escape key.

Windows® — Graphical shell operating environment that runs on top of DOS. It contains many accessories and features that access DOS functions such as file, program, and printer management. Windows is referred to as a GUI (Graphical User Interface).

Windows NT® — Microsoft Windows New Technology operating system that implements protected process multitasking, security, and other features of traditional operating systems, while maintaining a high level of compatibility with other Windows operating systems.

wire bulletin — See *bulletin*.

workstation — A personal computer (PC) that, when running the iNEWS client software, is called an iNEWS workstation. This the PC that is operated by end-users to write scripts or email, create rundowns (lineups), and so forth.

workspace — The area within the iNEWS main window consisting of the Directory panel, Queue panel, and Story panel. The iNEWS Workspace is where users can view, add, edit, and delete information.

write access The ability to add new stories, edit existing stories in a particular queue, add a queue, or add a directory.

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